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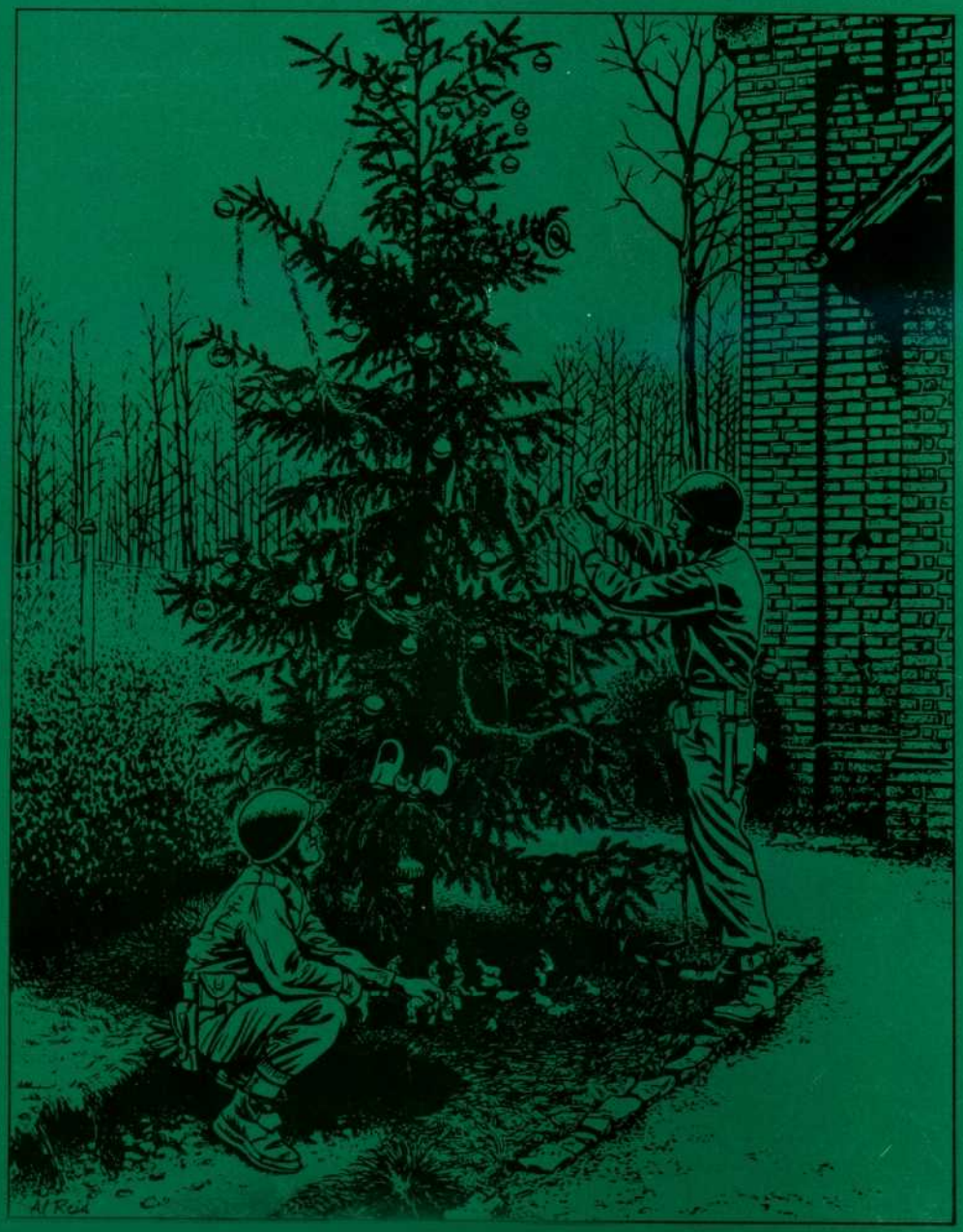
Infantry

November–December 1993



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Commandant, The Infantry School

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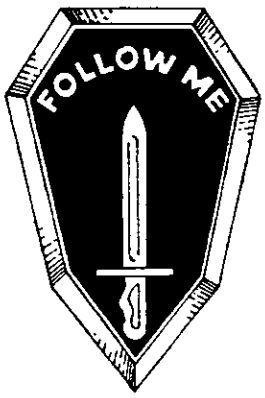

Infantry

November–December 1993 **Volume 83, Number 6**

FRONT COVER: U.S. soldiers in Belgium still found time to celebrate Christmas in 1944

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Commandant's NOTE

MAJOR GENERAL JERRY A. WHITE   Chief of Infantry

BRADLEY MODERNIZATION—MAKING A GREAT SYSTEM BETTER

The United States Army has long enjoyed dominance on the modern battlefield. Our technological edge has enabled us to dominate the night, deliver precise, lethal long-range fires, and deploy quality forces across distances that were beyond planners' wildest dreams three decades ago.

While we were establishing a comfortable lead, however, our potential adversaries were not napping. Advances in night vision technology, infrared systems, communications, and weapons have begun to close the gap. The issue was further complicated with the collapse of the Soviet Union and the dissolution of the Warsaw Pact. Suddenly, state-of-the-art systems that were once limited to the Soviet Union and its closest surrogates became available to virtually any nation—or organization—that had the money to buy them. This proliferation of sophisticated equipment, combined with our mission to deploy around the world, makes it increasingly probable that deployed U.S. forces will have to cope with opponents whose target acquisition, night fighting, and weapon systems approach parity with our own. How do we meet this challenge? We do it simply through continuous, unrelenting modernization, and one of the first steps in that direction is the Bradley Modernization Plan.

The Bradley is an ideal candidate for modernization initiatives, since it is a combat tested and proven system that has been around since 1982 and will remain the primary infantry and cavalry fighting vehicle operated beyond the year 2010.

The modernization plan is driven by the Army's imperatives to maintain land force dominance, meet congressional mandate, and develop an affordable acquisition strategy. We can maintain our land force dominance by retaining task force compatibility with the M1 Abrams tank, by maintaining our technological advantage on the digitized battlefield, and by achieving target acquisition and identification out to the full range of our weapon systems. We must adhere to the congressional mandate to retain our industrial base while beginning to upgrade the basic Bradleys. Finally, the use of existing technologies will enable us to arrive at an affordable acquisition strategy that meets the materiel needs of the force.

Given this outline of the parameters of the modernization plan, where do we want to go, and how will we get there?

In its end state, the Bradley fleet will consist of 6,724 vehicles, at four different levels of configuration. Of the basic, early issue Bradleys—referred to as the A0 model—2,005 will be allocated to the training base and to low [illegible] and redundant units until the vehicles are scheduled for future upgrades. Of the remainder, 1,681 will be upgraded into A2 models. The A2 will include such improvements as a 600 horsepower power train, 30mm ballistic protection, spall liners, ammunition restowage, and brackets to accept external reactive armor tile. The experiences of U.S. forces in Operation Desert Storm (ODS) have given rise to still further improvements to the A2, known as A2 ODS. These improvements will include a laser rangefinder, a global positioning system (GPS) and other navigational aids, a driver thermal viewer, a combat identification system, and a missile counter-

measure device. ODS restowage improvements will include bench seat configurations for increased soldier effectiveness after long movements, external stowage, and mounted ration heaters. As part of this upgrade, 1,433 Bradleys will be reconfigured to ODS specifications.

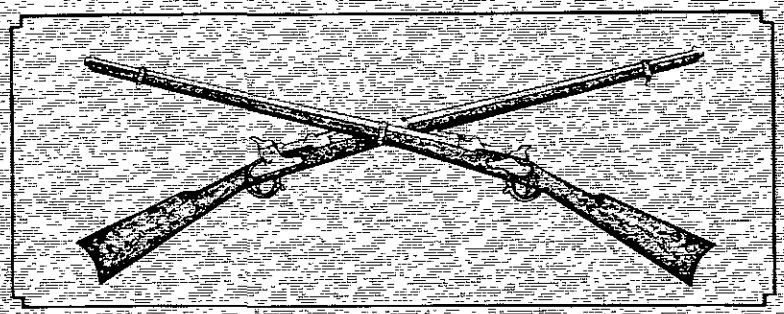
The final level of the modernization plan will be the A3 Bradley, which will include 1,602 fighting vehicles. The upgrades that earmark this vehicle will consist of improved core electronic architecture, second-generation forward looking infrared (FLIR) sensors, state-of-the-art command and control software, an independent thermal viewer for the vehicle commander, ballistic fire control, and a battalion set of armor reactive tile for initial entry forces. A significant feature of the A2 series improvements will be the increased lethality afforded by the TOW IIB missile and an improved round for the 25mm Bushmaster main gun. A number of the A2, A2 ODS, and A3 Bradleys will be allocated to the training base to ensure that soldiers will be trained on the same types of vehicles to be found in their future units.

These improvements to the Bradley fighting vehicle are impressive, and their effectiveness will be assured by corresponding changes in the training and the doctrinal literature that will support the Bradley force. The Bradley Master Gunner Course will reduce the current shortage of master gunners in units by improving the students' training and managerial skills, with particular emphasis on the preliminary, basic, intermediate, and advanced phases of Bradley gunnery. These skills will be reinforced in unit conduct-of-fire trainer (U-COFT) simulators, starting in the preliminary phase of training. The fielding of new equipment training (NET) teams to units as they receive the improved Bradleys will facilitate the transition of crews to the new equipment; this is significant for infantry units whose Echo companies are converting from M901 improved TOW vehicles (ITVs) to Bradleys. Important changes to tactics and techniques, as well as the latest information on gunnery skill testing and performance checklists, will soon appear in Change 1 to Field Manual 23-1, *Bradley Fighting Vehicle Gunnery*.

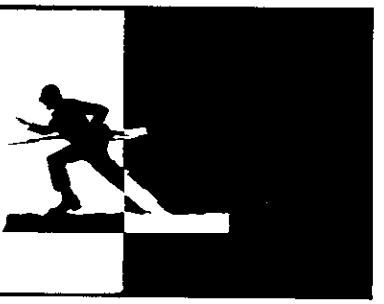
The end result of these modernization and training initiatives will be a Bradley force that has the command and control, mobility, lethality, survivability, and sustainability to match the M1A2 Abrams tank fleet that complements it. Without these upgrades, the Bradley force could well find itself confronting a future adversary without the technological edge that assures us of first-battle victory, such as we attained in the Gulf War.

The lessons of history bear examination; they have often been learned at terrible cost in terms of human life, destroyed materiel, and tarnished national prestige. We have heard a great deal about Task Force Smith—the first battle of the Korean War—which has come to represent the consequences of unpreparedness, but this lesson is wasted if we fail to realize that such catastrophes can often—and only—be prevented by timely planning and action. That is why the Army has undertaken the project of Bradley modernization.

The sheer military might of our Nation has often served to deter aggression, and the only way to remain a credible deterrent force is to demonstrate that our will and our capabilities far exceed those of a potential aggressor. The Bradley Modernization Plan will insure the United States Army's ability to deploy, fight, and win the first time out, against anything an adversary can throw at us.



INFANTRY NEWS



THE TOW TRAINING offered by the U.S. Army Infantry School at Fort Benning, Georgia is being modified. This modification was prompted by the success of the current Bradley infantry fighting vehicle (BIFV) training.

The present four-week TOW Leader Course is open to officers and noncommissioned officers (NCOs) from all Army components. In Fiscal Year 1993, 65 percent of the 196 students in this course were second lieutenants and 35 percent NCOs. The modified training splits this target audience into two separate courses: The four-week TOW Master Gunner Course, which teaches advanced technical skills and training management to experienced MOS-qualified NCOs; and the two-week TOW Platoon Leader Course, which teaches the basic technical and tactical skills to young officers.

Pilot tests for both courses will be conducted in 1994 as shown on the accompanying schedule. One of the officer classes will be conducted at Fort Bragg by a Mobile Training Team (MTT) from Fort Benning.

The TOW Master Gunner Course, open to NCOs in the ranks of sergeant (promotable) and above and in MOSs 11H and 19D, includes five days of gunnery on the precision gunnery training system (PGTS). During this training, students have an opportunity to conduct range operations, Gunnery Tables I through XIII with the TOW Gunnery Trainer (TGT) and the TOW Field Tactical Trainer (TFTT), and a live missile firing. Then they receive five days of instruction in training management, which includes preparing and presenting a 90-day training plan for a TOW section or company.

The course also offers three days of training on the MILES system, including installation, boresighting, troubleshooting, and maintenance. This training

TOW MASTER GUNNER COURSE

6 Mar – 1 Apr 1994
1 May – 27 May 1994
10 Jul – 5 Aug 1994

TOW PLATOON LEADER COURSE

10 Apr – 22 Apr 1994
5 Jun – 17 Jun 1994
11 Sep – 23 Sep 1994*

*MTT to Fort Bragg

is followed by two days of vehicle maintenance training in which troubleshooting, field expedients, and M901 turret systems are stressed. Finally, the students receive training on the secondary weapon systems, including the HMMWV interchangeable mount system (HIMS).

This course is tracked for the M901 improved TOW vehicle (ITV) and the M966 high mobility multipurpose wheeled vehicle (HMMWV). As the M901s in mechanized infantry Echo companies are replaced by BIFVs, the course will phase out the ITVs and track only the HMMWVs. The 11H NCOs in these units will then attend the BIFV Master Gunner Course, as will the 19Ds as their scout units are equipped with Bradleys. Once the transition is complete, the only NCOs attending the TOW Master Gunner Course will be those in the light infantry divisions. The School is currently researching the possibility of awarding an additional skill identifier (ASI) to graduates of this course.

To qualify for the course, NCOs must meet the rank and MOS requirements and also be BNCOC graduates, hold Secret clearances, and have certificates showing that they have passed the Gunner Skill Test (GST) (reference Field Manual 23-34, *TOW Weapon System).* Prospective students will also take the GST as a pretest when they arrive at Fort Benning and before being admitted to the course.

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The TOW Platoon Leader Course teaches the basic technical and tactical skills involved in TOW employment, maintenance, and training aids. It is either conducted at Fort Benning or exported in the MTT mode. The course focuses on basic technical tasks in Skill Levels 1 and 2, TOW PGTS gunnery, MILES training, training management, tactical employment, and fire control. It also includes system-specific maintenance that differs from the maintenance instruction the officers have received in the Infantry Officer Basic Course. Current plans for the course also include tactics training followed by a tactical exercise without troops (TEWT) for reinforcement.

Graduates of both courses will prove invaluable to commanders: The NCOs will be expert in TOW training at platoon, company, or battalion level, where they will help plan and execute TOW training programs. The officers will be expert in TOW training, tactical employment, and emplacement at company or battalion level; and their basic understanding of the TOW's capabilities and limitations will enable them to be more effective platoon leaders.

Both pilot courses are in the Training and Doctrine Command (TRADOC) Army Training Requirements and Resources System (ATRRS) for 1994. Since the maximum class size for both courses is only 28 students, commanders are urged to enter the names of their best-qualified NCOs and officers into the system as soon as possible.

For additional information, anyone

who is interested may call the 2d Battalion, 29th Infantry, at DSN 784-6742, commercial (706) 544-6742; or write to Commandant, U.S. Army Infantry School, Directorate of Operations and Training, Fort Benning, GA 31905; or to Commander, U.S. Army Infantry Center, ATTN: 2d Battalion, 29th Infantry, Fort Benning, GA 31905-5000. *(This note was prepared by Captain Matthew D. Anderson, Assistant S-3, 2d Battalion, 29th Infantry.)*

THE SNIPER TRAINING offered at Fort Benning by the U.S. Army Infantry School is being expanded. New developments in the capabilities of night vision devices (NVDs), changing conditions around the world, and the purchase of the Barrett .50 caliber rifle led to this expansion.

The new U.S. Army Sniper School will be five weeks long instead of three. It will include new counter-sniper training and will extend the training time devoted to marksmanship. The new course covers all the same tasks as the current one but also adds events that are based on equipment developments and includes more field training.

Three pilot test courses will be conducted from January through April 1994. Once these validation courses have been completed, the new program of instruction will go into effect for the remainder of the fiscal year. Graduates of the pilot courses will receive the additional skill identifier (ASI) of B4.

More seats in the classes will be offered to One-Station Unit Training (OSUT) soldiers immediately after basic training and advanced individual training (AIT). Thus, more sniper-qualified soldiers will be available to field units, and these units will save the cost of sending soldiers back to Fort Benning to be sniper qualified.

As a result, however, fewer seats will be available for soldiers already in the units as this transition progresses. By the end of Fiscal Year 1994, 75 percent of sniper school students will come directly from OSUT, and only 25 percent will be admitted from the field. Any commander who has a soldier he wants to send to Sniper School should therefore get the soldier's name in the Army Training Requirements and Resources System (ATRRS) as soon as possible.

For additional information, write to Commandant, USAIS, ATTN: DOT, Current Operations Division, Fort Benning, GA 31905; or Commander, 2d Battalion, 29th Infantry, ATTN: Sniper School, Fort Benning, GA 31905; or call (706) 544-6742, DSN 784-6742.

THE FOLLOWING PUBLICATIONS will be distributed to the field in December 1993:

STP 7-11C14-SM-TG, Soldier's Manual and Training Guide, MOS 11C, Indirect Fire Infantryman, contains standardized training objectives in the form of summary tasks to train and evaluate soldiers on critical tasks that support unit missions during wartime. This manual is for soldiers in Skill Levels 1 through 4 who hold MOS 11C, and for trainers and first-line supervisors.

ARTEP 7-8-Drill, Battle Drills for the Infantry Rifle Platoon and Squad, provides a set of core battle drills for infantry rifle platoons and squads. The standards for the drills are written within the context of general tactical principles that allow changes based on conditions during execution. The reduced time-distance aspects of battle drills make them excellent opportunities for training during the short periods that become available throughout the day.

Change 1, Field Manual 23-1, Bradley Fighting Vehicle Gunnery, provides important changes to tactics, techniques, and procedures for BFV units, and an updated gunnery skills test administration guide and performance checklists. Some of the other changes include a revised Bradley platoon training strategy and intermediate gunnery information.

AN ARMOR HOTLINE is maintained at Fort Knox to enable units around the world to communicate with the Armor Center and receive answers to questions relating to armor and cavalry issues. For example, a recent study of the hot line showed that most of the callers requested copies of current doctrinal manuals. Requests for information on maintenance

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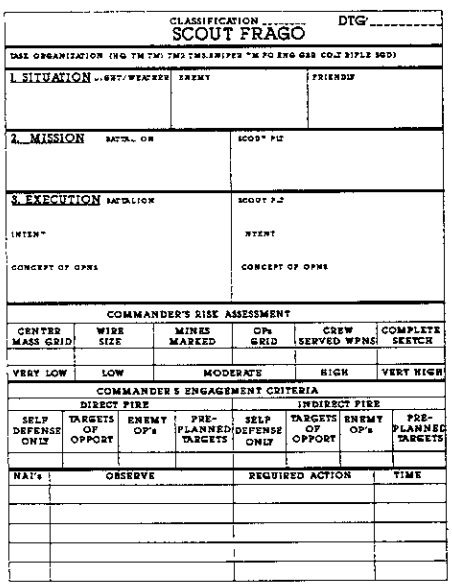
AN INFANTRY STAFF correction: In laying out the article "NTC Lessons Learned: The Scout FRAGO" (INFANTRY, September-October 1993, pages 45–46), we inadvertently used only the front side of the scout FRAGO form.

Here are both sides of that form, with our apologies to the authors and to our readers who may have been confused by this oversight.


CLASSIFICATION _____ DTG _____

SCOUT FRAGO

TASK ORGANIZATION (HQ TM TM) TM3 TM3 SNIPER TM PO ENG GRD COLT RIFLE SQD)

1. SITUATION ...ORT/WEATHER | ENEMY | FRIENDLY

2. MISSION BATTAL ON | SCOUT PLT

3. EXECUTION BATTALION | SCOUT PLT

INTENT | INTENT

CONCEPT OF OPNS | CONCEPT OF OPNS

COMMANDER'S RISK ASSESSMENT

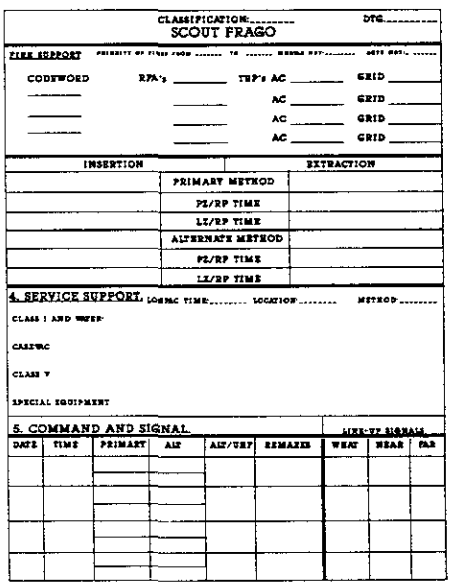
CENTER MASS GRID	WIRE SIZE	MINES MARKED	OPs GRID	CREW SERVED WPNS	COMPLETE SKETCH

VERY LOW | LOW | MODERATE | HIGH | VERY HIGH

COMMANDER'S ENGAGEMENT CRITERIA

DIRECT FIRE			INDIRECT FIRE		
SELF DEFENSE ONLY	TARGETS OF OPPORT	ENEMY OPs	PRE-PLANNED TARGETS	SELF DEFENSE ONLY	TARGETS OF OPPORT	ENEMY OPs	PRE-PLANNED TARGETS

NAI's	OBSERVE	REQUIRED ACTION	TIME


CLASSIFICATION: _____ DTG _____

SCOUT FRAGO

FIRE SUPPORT PRIORITY OF FIRES FROM _____ TO _____ RESUME NOT _____ DATE DTG _____

CODEWORD | RPA's _____ | TRP's AC _____ GRID _____

AC _____ GRID _____

AC _____ GRID _____

AC _____ GRID _____

INSERTION		EXTRACTION
	PRIMARY METHOD	
	PZ/RP TIME	
	LZ/RP TIME	
	ALTERNATE METHOD	
	PZ/RP TIME	
	LZ/RP TIME	

4. SERVICE SUPPORT. LOGSTIC TIME _____ LOCATION _____ METHOD _____

CLASS I AND WATER

CLASS III/C

CLASS V

SPECIAL EQUIPMENT

5. COMMAND AND SIGNAL. LIKE-UP SIGNALS

DATE	TIME	PRIMARY	ALT	ALT/VERT	REMARKS	WHAT	WHAT	PAS

issues ranked second and on gunnery training, third. Other questions were about changes in TOEs, the Class IX supply system, UCOFT (unit conduct of fire trainer) training, and BNCOC (basic noncommissioned officer course) attendance.

The Armor Hotline number is (502) 624-TANK, or DSN 464-TANK, or toll-free 1-800-525-6848. The Armor Hotline is also available through PROFS-KNO1 (TANKHELP), DDN TANKHELP% KNO1@LEAV-emh.army.mil. The caller will hear a recording that explains how to leave messages. Popular subject areas have been assigned individual mailbox numbers:

10—Main greeting and general inquiries.
11—List of mailbox numbers.
13—Combat development questions.
14—Battlespace Lab questions.
15—Maintenance questions.
16—Weapons questions.
17—Tank gunnery training questions.
18—Tactics and doctrine questions.
19—Armor Center and training questions.
20—Safety-of-use messages.

A caller who is unsure about which mailbox to use may leave a message after the initial recording, and his question will be sent to the correct agency.

The Armor Hotline is accessible 24 hours a day, seven days a week. Whenever possible, questions will be answered within 72 hours.

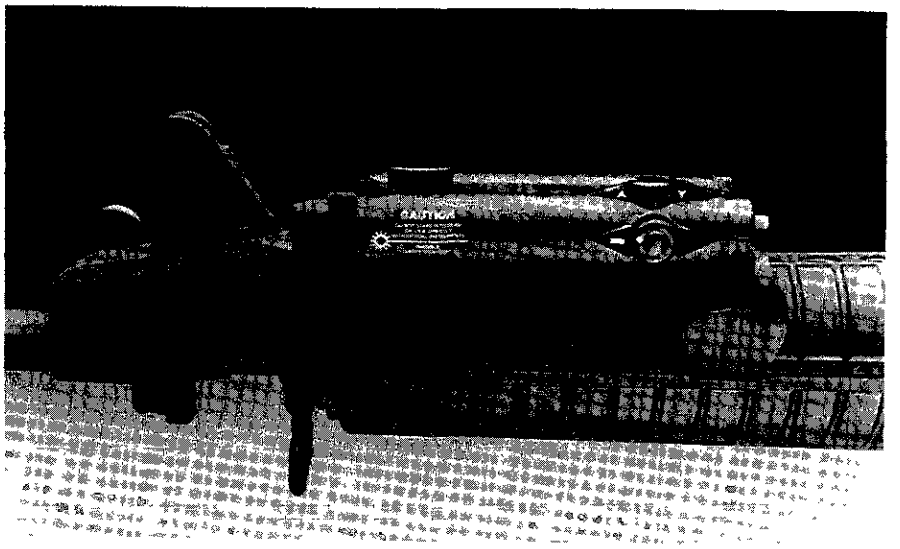
THE AN/PAQ-4B INFRARED aiming light, now being fielded, is a significant improvement over its predecessors. It has a range of 600 meters in full moonlight conditions and a longer range on darker nights. Its narrower beam produces a smaller, more distinct aim spot for greater accuracy. It also has improved off-axis visual security. Unlike previous aiming lights, the beam from the AN/PAQ-4B leaving the system cannot be seen by enemy troops equipped with night vision devices who are more than six degrees off axis. Soldiers should be aware, however, that beam reflections from smoke or fog can be seen off-axis by enemy forces with night vision devices.

The new AN/PAQ-4B incorporates a number of features that dramatically simplify boresighting. These advances enable a soldier to be nearly boresighted when the aiming light is initially mounted. Only fine adjustment is then required to be zeroed precisely. This simplified boresighting is achieved because the aiming light has a neutral position setting at which the laser beam is aligned with the mounting surface, and a precision bracket that is provided with each system.

The 26th (Yankee) Infantry Division, Massachusetts Army National Guard, deactivated on 28 August 1993. It was the oldest combat National Guard division in the Nation, having been activated on 22 August 1917. Various reenactment groups participated as the division's colors were cased.

To zero the aiming light to an M16 rifle, the user sets the light's boresight adjusters to their neutral position, attaches the M16 bracket supplied with the system to the M16, then attaches the aiming light to the bracket. The precision of the aiming light and bracket are such that when the user fires at a 25-meter M16 zeroing target, the shot group is on the target. The user then adjusts the azimuth and elevation adjusters to bring the shot group to the target's designated strike point for precise zero. This final adjustment is also simple; one click of the adjuster moves the strike point one square on the standard M16A2 zeroing target.

The M16 bracket is used to attach the aiming light to the M16A1 and A2 rifles and the M16/M203 rifle with grenade



The AN/PAQ-4B infrared aiming light is seen here, mounted on an M16 rifle.

launcher. The bracket adapter is used to attach the aiming light to all standard AN/PVS-4 and AN/TVS-5 weapon sight brackets. These standard brackets are already in the field or can be requisitioned as additional authorized items for the AN/PAQ-4B. Also available as additional authorized items are special brackets for attaching the aiming light to the M249 machinegun and the new M4 carbine.

A user operates the AN/PAQ-4B infrared aiming light by depressing a switch lever built into the light unit. Or the light can be operated with a cable switch, provided with each system, that plugs into the back of the aiming light.

With its increased range, smaller size (5" by 2" by 3/4"), lighter weight (less than one-third pound with two AA batteries installed), ease of boresighting, and ability to fit most standard individual and crew-served weapons, the AN/PAQ-4B is a highly effective, easy-to-use system that enables a soldier to direct fire at night.

THE PRE-RANGER COURSE is one of several initiatives now under way at Fort Benning to improve Reserve component (RC) training for soldiers in the Army National Guard (ARNG) and Army Reserve Troop Program units.

This first initiative resulted from the increasingly high attrition rate for ARNG soldiers entering the U.S. Army Ranger Course. The ultimate goal is to reduce this attrition rate by 40 percent.

The program of instruction for the Pre-Ranger Course (PRC) provides enough refresher training, physical training, and acclimatization to enable the National Guard soldiers to begin the Ranger Course on an equal basis with their Active Army contemporaries. The course will be offered two weeks before the start date of a Ranger class.

In the three PRC classes conducted to date, 16 of 17 ARNG soldiers went through the PRC successfully and completed the Ranger Assessment Phase of the Ranger Course. This success rate far exceeds the goal, and the PRC is now a prerequisite for ARNG soldiers attending the Ranger Course. (The accompanying table shows the dates for the remainder of Fiscal Year 1994.)

1994 SCHEDULE
ARNG PRE-RANGER COURSE

24	JAN	94 –	06	FEB	94
14	MAR	94 –	27	MAR	94
25	APR	94 –	08	MAY	94
23	MAY	94 –	05	JUN	94
27	JUN	94 –	10	JUL	94
22	AUG	94 –	04	SEP	94

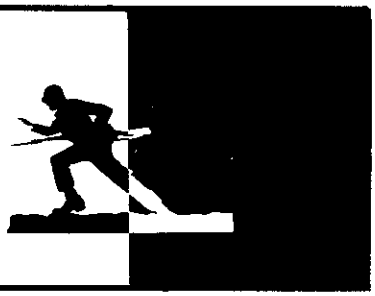
This program, modeled after several pre-Ranger courses now existing in the Active Army, is conducted by Ranger-qualified National Guardsmen on Active Duty Work Tours. It is managed by the Special Assistant to the Commanding General-Army National Guard at Fort Benning.

Among the other RC initiatives under way at Fort Benning are the Reserve Component Bradley Crew Training Strategy and the federal Officer Candidate School (OCS) Pilot Program with an ARNG Active Guard Reserve (AGR) cadre. These other programs will be discussed in future issues of INFANTRY.

The point of contact for additional information on the Pre-Ranger Course is LTC Willis, Special Assistant to the Commanding General, Army National Guard: DSN 835-5741, commercial (706) 545-5741.

A CONTRACT HAS BEEN awarded for the production of 25mm ammunition for the automatic cannon used by the Army, Navy, Air Force, and Marine Corps. The 25mm cannon is used on the Bradley fighting vehicle, the light armored vehicle, the AV-8B Harrier aircraft, and shipboard defense systems. The contract calls for four different types of training and combat ammunition.

PROFESSIONAL FORUM



The Bulge: A Remembrance

LIEUTENANT COLONEL ALBERT N. GARLAND, U.S. ARMY RETIRED

On the morning of 20 December 1944, I was a first lieutenant commanding Company L, 334th Infantry Regiment, 84th Infantry Division. For the past month we had been in almost continuous action as part of the U.S. XIII Corps, Ninth U.S. Army, in and around the North German towns of Prummern, Beeck, Wurm, and Lindern. (For part of that month, we were under the operational control of the British XXX Corps, then commanded by Lieutenant General Brian Horrocks.) Our primary objective from the beginning was the Roer River, and we were getting close to it despite strong German resistance and miserable weather conditions.

I had been told the previous evening that our battalion—the 3d Battalion—was being pulled out of the lines for a short stay at the division's rest center at Eygelshoven, a small Dutch town that lay just across the border some 10 or 12 miles from our present location. I had also been told that my mess crew and its equipment was going there right after it had delivered a hot breakfast on the 20th, and that I could expect a number of two-and-a-half-ton trucks to reach me shortly after the mess crew departed. These trucks would take my company to Eygelshoven, at which time I would release them to their parent unit. (If I remember correctly, these trucks belonged to a Quartermaster truck company, one of several such units then supporting the division.)

My mess crew arrived with our hot breakfast early on 20 December and left about an hour later. The mess sergeant and I talked about his going to Eygelshoven, and he promised he would have a good meal ready for us when we got there about noon.

At about 0900 the trucks arrived and I soon had the company loaded and ready to go. As we pulled out to become part of the battalion's convoy, my soldiers were in good spirits, thinking ahead to several days in warm, dry billets among a civilian populace that really seemed to care for them.

We did not reach Eygelshoven that morning. (We did get there eventually, but much later—February 1945.) I did not know at the time, but shortly after we started out the battalion commander received orders to head for Aachen, which lay in the opposite direction.

When we reached Aachen we were told we were going to Belgium, but where in Belgium no one seemed to know. Why we were going was another unanswered question. My main concern was for my mess crew: I kept wondering if the mess sergeant had been told about the change in plans, and whether I would ever see my cooks again.

I don't think anyone in the convoy that day had any idea of the extent of the German breakthrough, or what steps were being taken to counter it. (We found out much later that we had followed the 7th Armored Division, another Ninth Army unit, to Belgium. We did run across some of that division's rear echelon units, but never encountered any of its combat elements.)

We paused for a short break in Liege, where I had to turn over to the MPs a truckload of my soldiers who were designated to serve as guides along the way to our final destination. We still did not know where that was, and I screamed and hollered about giving up my soldiers, but lost the argument. With the way things were going, and with so little information, I feared I would never see those men again—the same fear I had about my mess crew. (The soldiers did get to me in the next few days, seemingly none the worse for their experiences.)

From Liege we headed almost due south and reached the town of Marche early in the evening. (It seems to me that we traveled almost 130 miles.) We were ordered off the trucks and into defensive positions on the outskirts of the town. We had no maps of the area, we did not know where the Germans were, and we did not know what we were expected to do. We knew there were other U.S. units around but did not know where they were. A 7th

Armored Division aid station was just closing down and leaving, but the medical personnel could tell us little about the situation.

Two days later my company was defending a three-mile front that ran from one small Belgian town—Marenne—to another equally small one—Menil. We weren't sure who was on our left, but a sister company was on our right, across a small valley, in the town of Verdenne. It, too, had a wide front to defend.

I kept one platoon in town with me, plus a platoon of tank destroyers that had been sent up by someone in the rear. My other two rifle platoons occupied strong points along a wooded ridge that ran almost to Menil. They used foot patrols to keep in touch with each other, with me, and eventually with a U.S. unit that appeared in Menil. We also had wire communications with each other, but we could communicate with battalion headquarters only by radio.

We did know we had one heck of a lot of artillery in support and were told to call for it on the slightest German provocation. That we did, in a big way, even when one German force broke through the Verdenne defenders and circled to our rear. There it stayed in a wooded area about 1,000 yards away until the day after Christmas. Actually, that German unit's advance had been halted by our battalion's reserve company and by other companies from the regiment that had been fed into the fight. The only thing we knew for certain, however, was that we were to stay where we were as long as we could.

We received a welcome surprise early on 26 December when our mess crew arrived with a Christmas dinner, which featured turkey and all the trimmings. (Well, almost all of them!) My mess sergeant told me he had been trying to get in touch with me for several days, but had not been able to do so. He had finally found a back road into Marenne that skirted the German force in our rear, and had received permission from battalion to try to get to us with some hot food. He and his crew were a most welcome sight, and the platoon carrying parties were soon on their way to pick up their share of the food.

Unfortunately, before we could distribute the food, and before the carrying parties arrived, I was told by the leader of the platoon I had kept in town that the German force that had been in our rear was now coming in our direction, down the valley between Marenne and Verdenne. It was still early in the morning, and he told me that while he could not make out the German vehicles, he was sure—from the sound of their engines and the noise their tracks were making—that they were headed for our town.

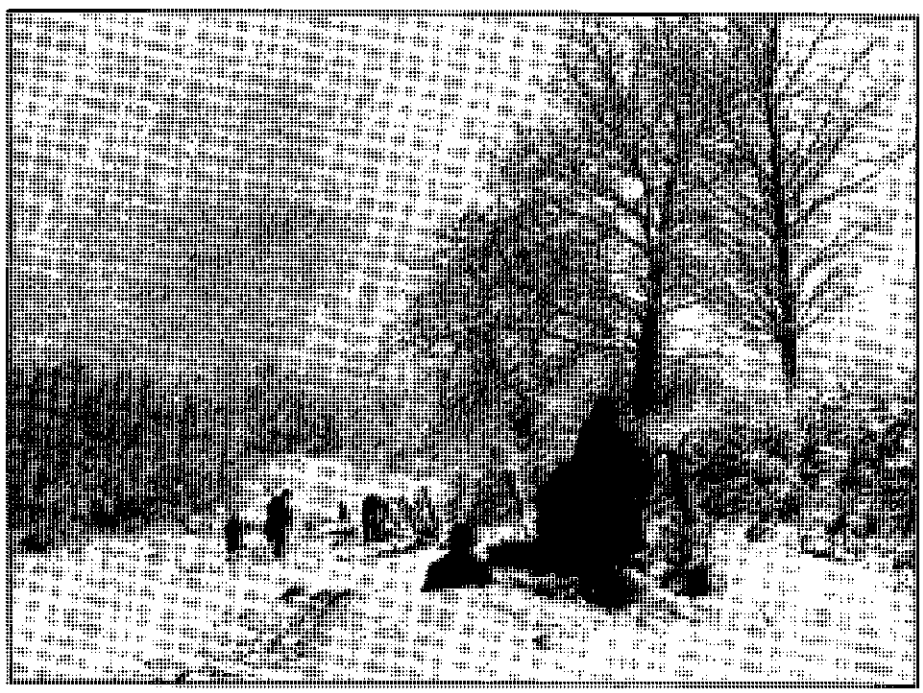
I instructed him to pull his "daisy chains" (antitank mines tied together) across the street (there was only one in town), and I alerted the tank destroyer platoon leader to get his vehicles cranked up to take on the approaching German armor. From what information I had, I assumed we still had some time before the Germans came in. It was a sizable force headed our way. I knew because we had been dueling with those people for the past several days.

I was sadly mistaken about how much time we had; I had no sooner finished talking with the tank destroyer commander than the lead German vehicles were coming down the street. Apparently, my platoon had not been able to place its mines across the roadway, and the tank destroyers were now practically helpless, since each was in a separate building and not prepared to fight.

Our few bazooka rounds bounced harmlessly off the side of the lead German tank, which was a monster, so I did the only thing I could: I called for an artillery concentration right on top of us. Fortunately, we had plotted just such a concentration, thinking we might need it at a future date. I had some difficulty convincing the artillery liaison officer at battalion headquarters that I knew what I was doing, but he finally approved the shoot.

I managed to get word to my other two platoons as to what was happening in Marenne, and told the farthest one out to alert the U.S. unit it had made contact with in Menil. I ordered the nearest one to take up positions on the west edge of town where it might pick off any German stragglers, but I warned the platoon leader about the concentration that was about to come in. Those of us still in town headed for cellars.

I don't know how many artillery battalions fired that concentration for us, but there must have been quite a few. Any German soldiers and vehicles that did not see their end in Marenne fled the town, only to be mopped up by my two platoons



U.S. infantrymen of the 84th Division in the Battle of the Bulge. Units of the division are supporting troops crippled by the German counterthrust, 4 January 1945.

and the unit in Menil. Unfortunately, I think we took the second stories off most of the houses in Marenne and deposited them in the street.

But I came up out of my cellar grinning from ear to ear and very happy to be alive. So were the few men I still had with me, including the mess crew, none of whom had ever been through anything like this. To our sorrow, though, we saw that a German tank had flattened the trailer that held our Christmas meal.

My company was relieved several days later, and we moved to a reserve position, strangely enough in what was left of Verdenne, the town just across the valley, although it took us several days and lots of walking in what seemed to be circles to get there.

Still later, beginning on 3 January 1945 in a driving blizzard, our battalion was committed as part of a large U.S. counterattacking force (the VII Corps) to close the bulge the Germans had driven in our lines. (Three days later, I was lying in a roadside ditch trying to hide from the effects of a German artillery bombardment that was shredding the tops of the trees that bordered the ditch and covered the surrounding hills and valleys. My radio operator, just behind me, tugged on one of my boots. When I turned toward him, he motioned that I had a call on the radio, which was on the battalion command net. I inched back to him, reached for the mike, and gave my call sign. Our battalion S-1 was on the other end. He said he just wanted to let me know that Headquarters First Army had just approved a battlefield promotion to captain for me, effective 4 January. Rather sarcastically, I suppose, I accepted the news, which was the last thing I needed to hear at the time, and asked him to get me a set of captain's bars for when and if I ever got out of that ditch alive!)

We took part in the rest of the so-called Battle of the Bulge and ended our stint in Belgium in late January in the small town of Beho. (I don't remember when I got my bars.)

In early February, we finally made it to Eygelshoven and those warm, dry billets. And for those of us who were left—there weren't many—it was good to be home.

Lieutenant Colonel Albert N. Garland, U.S. Army Retired, served as editor of INFANTRY before his retirement from the Army in 1968 and again as a civilian from 1983 to 1992. During an earlier assignment to the U.S. Army Center of Military History, he co-authored *Sicily and the Surrender of Italy,* a volume in the Army's official World War II series. He edited several other military books, including *Infantry in Vietnam.*

Checkpoint/Roadblock Operations

MAJOR MARTIN N. STANTON

Among the most common tactical operations that are conducted in peace enforcement and humanitarian relief operations are checkpoint and roadblock operations—both at the bivouac sites of U.S. Army personnel and at mission critical installations such as headquarters, trains and logistical areas, airfields, or food distribution sites. In the deployment of Somalia, this has been true not only for the U.S. Army elements but for U.N. operations as well.

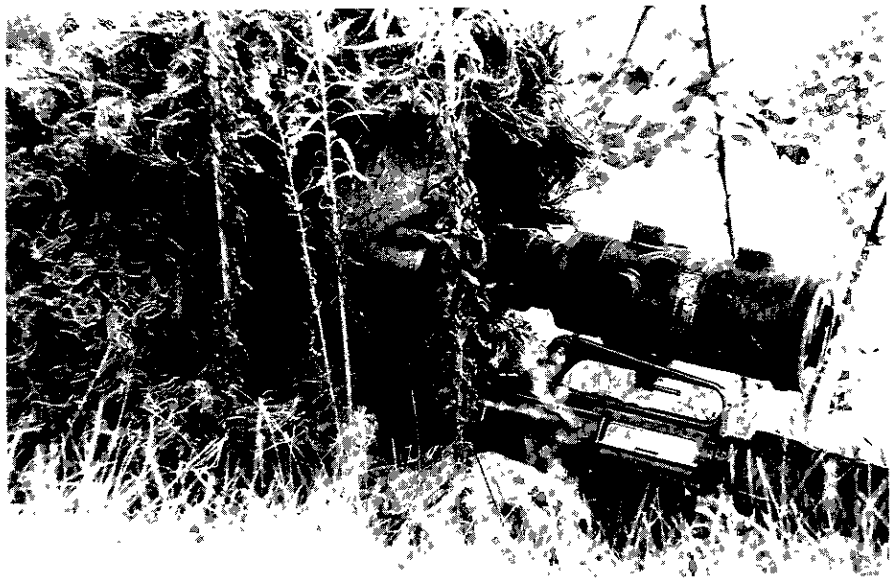
Checkpoints normally serve the dual purpose of screening the traffic passing through and presenting a barrier to hostile forces. They must be exposed and clearly visible, and the personnel manning them must have access to covered and concealed positions and enough firepower to react to fast-developing situations.

The following are some of the principles developed by the 2d Battalion, 87th Infantry, for these operations, many of which were used during the battalion's deployment to Somalia.

Personnel and Equipment. A checkpoint should not be manned by a unit less than fire-team size (four or five men, including a noncommissioned officer). Although a squad-size unit allows for multiple automatic weapons and the ability to inspect more vehicles and groups of people, the number of checkpoints or missions assigned to a company may preclude the use of a squad.

Each checkpoint should have at least one automatic weapon and one grenade launcher. The checkpoint element should also have AT-4 antiarmor weapons readily accessible for firing on short notice and claymore mines positioned to cover the roadblock. For communications equipment, the checkpoint should have both wire and FM radio communications with the site command post. The checkpoint should also have zeroed night observation devices for all weapons, including a Dragon night sight, if possible, along with at least one pair of binoculars. If interpreters are available, they should be prepared to come to the roadblock on short notice.

Positioning of Personnel. A checkpoint should be at least 150 to 200 meters from the installation it is guarding. Most of the checkpoint personnel should be at least 50 meters from the position where vehicles and personnel are actually halted, and some should be in a position within 20 meters that allows one of its occupants to move forward and inspect vehicles or groups of people and then



Night observation devices, such as the starlight scope, can be particularly useful on checkpoint and roadblock operations.

remove the roadblock. Most of the firepower and command and control should be about 50 meters away.

Roadblock or Checkpoint Material. Roadblocks should consist of concertina wire and wooden sawhorses that one man can easily move. The 50 to 100 meters leading to the roadblock should have a series of zigzag obstacles that will force drivers to go around them slowly (at about five miles per hour). These obstacles should consist of heavily staked triple concertina fence with surface-laid M-21 mines. Earthen berms, abatis, or ditches cut in the roads also work well.

The advantages of mines and wire are that they do not offer potential cover to enemy forces as the other options do. Their disadvantages are that they may blow up vehicles carrying people who are not hostile but merely bad drivers.

The type of roadblock used depends largely on the threat. A higher threat necessitates a more substantial and lethal roadblock. Regardless of the type used, it should be able to stop a vehicle that is trying to speed or crash through it. All roadblocks must have warning signs at least 100 to 150 meters away from the first zigzag obstacle.

Roadblock or Checkpoint Operation. The soldiers manning a roadblock should maintain full alert so long as any non-U.S. or non-allied personnel or vehicles are near it. The roadblock detail should at least keep the automatic weapon manned at all times and have one soldier scanning with the binoculars. When any vehicles or dismounted personnel are seen approaching, the roadblock goes to full alert. Those approaching are allowed to reach the sawhorses or the barbed wire on the road (that is, occupy the kill zone of the roadblock's weapons and claymores) before one designated man from the close position moves up to challenge them. This designated soldier inspects the vehicles and personnel. If he must go out of the site, he first calls an additional man forward to cover him. At checkpoints or roadblocks with a large volume of traffic, this task is better handled by a separate fire team. High-use checkpoints should be manned by at least a squad.

The soldiers look for armed personnel or explosives of any type. The detail should have an emergency position dug close to the block for the search personnel. At the first sign of trouble, the personnel jump into this hole, or at least throw themselves flat and low-crawl out of the kill zone. Most of the fire should come from the overwatching position. The detail should have a covert signal such as a codeword that can be said in a normal conversational tone of voice to alert the overwatching element that the search team is about to break for cover. The overwatching element should begin firing as soon as the search team has thrown itself flat or reaches cover.

The checkpoint should also keep track of the number and type of vehicles and personnel traveling through the checkpoint and also log the time of each. Unless personnel limitations demand that a detail be rotated at night, checkpoint details should trade off in daylight only. The troops on checkpoint detail have little opportunity to rest, and the obvious advantage to placing a squad on checkpoint detail is that it has more people to perform the duties. Troops on checkpoint duty also spend long hours exposed to the weather conditions.

Leaders must make sure actions that may compromise camouflage (such as poncho sunshades) are not allowed to lessen the effectiveness of the overwatch positions. They should also consider uniform requirements. For example, in tropical climates, troops should have plenty of water and sunscreen available and should wear minimum load-bearing equipment when not actually engaged in guard duty or roadblock operations. Soldiers must wear some sort of head cover at all times. All personnel actively involved in the checkpoint operation (search teams and the like) should wear full body armor and helmets.

Finally, the greatest challenge to soldiers in checkpoint operations is staying alert. Checkpoint operations are boring, and the urge to cut corners increases as the weeks turn into months (and maybe years). We need only look back to the disaster at the Marine Corps barracks in Beirut in October 1983 to find an example of what happens when those on the outer perimeter and the checkpoints become lax. The same mind-numbing dullness, day in and day out, becomes the enemy, and the only effective solution is constant checking and double checking to enforce standards.

Since it is likely that operations such as these will be the most likely in the future, our units must train and prepare for checkpoint and roadblock missions.

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Light Infantry
In Cold-Wet Conditions

LIEUTENANT COLONEL JACK H. CAGE

In late-1992, my battalion of the 7th Infantry Division took part in two training exercises. I was sure we were ready for them. We had prepared our soldiers for the tough conditions they would face—a determined enemy, trenches and bunkers, vast terrain, chemicals, and so on. But we were surprised in both cases by an adversary I hadn't taken seriously enough—cold and wet weather—conditions that desperately reduced the battalion's ability to fight:

• In October, while training at Fort Hunter Liggett, the battalion was preparing for and executing a truck movement and dismounted infiltration. The rain began at mid-morning. The soldiers donned their suits of PTFE (polytetrafluoroethylene—commercially known as Gore-Tex) and conducted rehearsals and preparations for combat in the rain. The suits were saturated within an hour. After 14 hours of continuous rain and wind, with temperatures near 38 degrees, a dozen soldiers had to be evacuated to the combat trains for warming. To protect the rest of the force, I delayed a portion of the operation for about 12 hours; by that time, everyone was soaked and the temperature was dropping.

• In December, while training at the National Training Center (NTC), the battalion was preparing for a live fire defense. At about 0300, heavy rain began. Since the weather report had not forecast rain, our soldiers had not erected shelter halves or poncho shelters. Many soldiers awoke in rain-soaked sleeping bags. After more than 14 hours of continuous rain, temperatures of 35 to 40 degrees, and very high winds, some 16 soldiers were evacuated for cold-related conditions. We went all out to dry and warm our soldiers, setting up tents, using borrowed heaters, and positioning running M1A1 tanks so the exhausts would dry them. As nightfall approached, with forecasts of a wind-chill factor of 20 degrees below zero, the battalion still had more than two companies' worth of cold and wet soldiers.

Later, as we looked into what had happened, we learned more about preparations for and operations during cold-wet conditions. The question was: How can we protect light or dismounted infantry soldiers in cold and wet weather? We came up with some answers. I would like to share with other units an outline of the training and equipment necessary to keep infantry soldiers effective when exposed to cold and wet weather for long periods.

Training and Planning

We found that many of the soldiers had not waterproofed their equipment by putting it in their rucksacks and B-bags. Accustomed to the normally dry conditions of Fort Ord, and not expecting rain at Hunter Liggett or the NTC, leaders and soldiers had not been concerned with waterproofing. We discovered, in fact, that many soldiers had forgotten how to waterproof themselves and their gear.

A more detailed weather forecast during the NTC rotation would have offered some warning and allowed soldiers to erect cover. At least, they could have ensured that their sleeping bags were kept dry.

Leaders have to plan for cold and wet operations. When these conditions seem likely, leaders must figure out how to better protect their soldiers from the elements. Further, they need to determine what actions they will take when soldiers and their equipment do get wet. Careful planning beforehand will decrease cold weather injuries and maintain combat effectiveness.

Individual Equipment

In both incidents, the PTFE jackets or suits issued to our light infantry soldiers did not protect them from continuous rain; they became saturated within an hour. We were surprised that this "high-tech" gear had failed to keep us dry. That surprise led to many phone calls around the country, to Fort Benning and to the U.S. Army Natick Research, Development, and Engineering Center in Massachusetts. The answers were that the PTFE suit's water-resistant capability might be degraded after repeated wear and laundering. But more important, we learned that the PTFE jacket and trousers, while allegedly water-resistant, were not designed to protect against rain.

To protect themselves against wet conditions, soldiers in light infantry units and other dismounted infantry soldiers must have the standard Army wet-weather suit (parka and trousers) commonly referred to as "the Gumby suit." These items, designed to protect soldiers against wet weather, are the best equipment currently available to keep them dry. Some new equipment may be in the testing phase; all I know is that my soldiers needed waterproof gear last year, and other units still have soldiers operating under such conditions today.

The sleeping bags (intermediate cold)

now issued to light infantrymen get wet easily and are extremely difficult to dry. Obviously, a wet sleeping bag reduces a soldier's ability to operate for an extended period in a cold environment.

An excellent solution to this problem is to purchase and issue less absorbent sleeping bags, with PTFE-like waterproof covers. Combined, these two items are commonly referred to as the "Gore-Tex sleeping bag." First, this equipment is less prone to getting soaked in its highly water-resistant cover. Second, if it does get soaked it dries faster than a standard sleeping bag. Finally, PTFE bags reduce a soldier's load in both weight and bulk.

One bright spot in the battalion's two encounters with cold-wet conditions was the intermediate cold-wet boot, the PTFE boots or "Rockies" that we have been issued in the 7th Division. Soldiers who were wearing these boots kept their feet warm and dry during both encounters.

The age-old problem of the soldier's load also comes into play as we discuss individual equipment. A soldier's rucksack is already filled with his sleeping bag, chemical protective over-garments, additional clothing, ammunition, food, water, batteries, night vision goggles, and the like. Any additional equipment for combating rain and cold must be lightweight, compact, and resistant to water retention, thus adding weight.

Tentage and Drying Equipment

Training in field skills, advanced warning from accurate weather forecasts, and waterproof wet-weather suits and boots should help keep light infantrymen dry. But sometimes even these measures fall short, and when the soldiers get wet in cold weather, unit leaders need access to tents and heaters to warm and dry them. Units need only enough tents and heaters to rotate soldiers through.

Clearly, the disadvantage to adding more equipment to infantry companies is transporting it to the theater of operations and then moving it close enough to the battlefield to be of use. One of the more serious weaknesses in the light infantry design is the shortage of organic transportation within a light brigade, including its associated forward support battalion. Any additional tents and heaters need to be accompanied by the additional transportation assets to move them.

It's easy to say that light fighters don't need all this additional equipment; they're tough. But when leaders find that a good portion of each company's soldiers have rapidly dropping core body temperatures, they have moved from tough to vulnerable. Individual and unit equipment should be tailored to meet the demands of the expected conditions. A leader's analysis of mission, enemy, terrain, troops, and time (METT-T) must consider the subtleties of weather and, specifically, wet and cold conditions. Light infantry soldiers can go anywhere if they are properly equipped for the conditions they will find.

The subject of operations in cold-wet weather short of arctic conditions has not received the attention it deserves. Doctrine writers need to review the current literature dealing with cold-wet conditions. When they do, they may decide to develop documents or lesson plans, including videotapes and publications, that deal with such field skills as the proper wear of waterproof or water-resistant clothing, waterproofing gear in rucksacks and B-bags, and building shelters to keep soldiers dry.

Commanders from brigade through company level should require weather forecasts every 12 hours while in the field. When cold-wet weather is possible, these commanders should require subordinate leaders to backbrief their plans for preventing their soldiers from getting wet and for drying them and their equipment when they do.

To fix current problems with our PTFE gear, commanders should immediately requisition enough standard wet-weather suits (top and trousers) for every soldier in their units. The standard wet-weather suits are described as *parka, wet weather, coated nylon*, with a basic NSN of 8405-00-001-1547, and *trousers, wet weather, coated nylon*, with a basic NSN of 8405-00-001-8025. (These NSNs vary by size.)

Officials at Natick Laboratories may want to review once again the problems with the current family of PTFE equipment. Further, I would ask them to work on the next generation of gear to give us an enhanced wet-weather suit.

PTFE sleeping bags should be bought along with waterproof cases and issued to soldiers in light, airborne, and airmobile divisions. These sleeping bags are far lighter and less bulky than the current cold-weather sleeping bags, and they dry much faster. The specific items include *sleeping bag* (NSN 8465-01-259-4868); *case, sleeping bag* (NSN 8465-01-305-4688); and *bag, extreme cold weather* (NSN 8465-01-305-6360).

Tents and heaters should be issued to infantry units so they can warm and dry any soldiers who do get wet. One option is to issue one GP medium tent and two diesel/JP8-fueled stoves per company. Another option is to issue one 10-man arctic tent and gravity-feed heater to each platoon. This equipment can be stored on pallets in the field trains until it is needed.

Intermediate cold-wet boots should be bought and issued to soldiers as well. These boots must be stocked in the central issue facilities that support units.

I spent my time in battalion command preparing to fight—either in combat or at the NTC—and we were prepared for a well-trained enemy, night operations, trenches and bunkers, and chemicals. Unfortunately, we were not as well prepared for the threat of cold-wet weather. I'm sure other light infantrymen will soon face these same challenges somewhere in the world, and I hope some of these ideas will help them prepare for this additional threat. By properly training and equipping our soldiers to operate under cold/wet conditions, we will ensure that they can fight and win under extremes of weather that would demoralize and defeat a less disciplined force.

Lieutenant Colonel Jack H. Cage commanded 2d Battalion, 9th Infantry, 7th Infantry Division, in which he also served as battalion executive officer and tactical evaluator, and is now attending the Army War College. He is a 1975 graduate of the United States Military Academy and holds a doctorate from Columbia University. He has written several articles for INFANTRY and other military publications.

The S-3 Air
More Than An Airspace Coordinator

LIEUTENANT JOHN R. ROSENFELD

When asked what the S-3 Air does, many members of an infantry battalion task force will say only that he coordinates tactical air support. Army field manuals do not do him justice either. Field Manual 71-2, *The Tank and Mechanized Infantry Battalion Task Force*, says he is the principal assistant to the S-3, and that he coordinates the use of battalion task force airspace and the employment of air support with the fire support coordinator, the tactical air control party, and the Aviation liaison officer, as well as the Air Defense section or platoon leader.

Coordinating tactical air support is certainly his primary function, but he is normally given other duties as well. And since he is the battalion's only assistant staff officer in the authorized rank of captain, it is reasonable to expect that he will do more.

On the basis of my year as a battalion S-3 Air in the 3d Infantry Division, including a training rotation at the Combat Maneuver Training Center (CMTC), I would like to suggest the following list of possible duties and responsibilities for the S-3 Air:

- Prepare and issue the task force warning order.
- Develop possible friendly courses of action (COAs).
- Lead the planning group in the analysis of these COAs.
- Prepare the task force operations overlay.
- Supervise the assembly, reproduction, or issue of the task force order.
- Participate in the order briefing: Prepare visual aids (operation sketch), and brief portions of the scheme of maneuver.
- Prepare the terrain model for the task force rehearsal.
- Lead the rehearsal.
- Perform the duties of "battle captain" during the execution of the operation.

Many of these are duties normally conducted by the battalion S-3 or executive officer (XO). When the S-3 Air does any of them, the S-3 and the XO may assume supervisory roles in the planning process. The S-3 can then concentrate on coordinating all the battlefield operating systems (BOSs) into the plan instead of focusing strictly on the maneuver elements; the XO can devote more attention to supervising the combat service support (CSS) planning for new operations and recovery from previous operations.

The Warning Order. A warning order needs to be prepared and issued immediately upon receipt of a mission so the task force will have as much preparation time as possible. If the S-3, the XO, and the commander are not available, the S-3 Air can go ahead and prepare the order. Changes to the order or additional instructions can be added later through a net call.

Immediately upon receipt of an order from brigade, the S-3 Air can disseminate it to the various elements of the planning group, and then prepare a warning order on the basis of their guidance. A standard warning order format can be found in most unit tactical standing operating procedures.

The S-3 Air can get the assessment of the enemy situation from the S-2. On the basis of the brigade order, he can add the task force mission statement, the required attachments or detachments, the earliest time of movement, and a general concept of the operation. As for the time and location of the order brief, the S-3 Air must seek guidance from the S-3 or the commander.

Friendly Courses of Action. During continuous operations at the CMTC, a task force normally receives a new mission before completing the last one. In the absence of the command group, the S-3 Air can begin developing friendly COAs, in coordination with the planning group—S-2, S-4, fire support officer (FSO), task force engineer, and air defense artillery platoon leader. Having planned previous operations with the S-3 and the battalion commander, the S-3 Air normally has a fairly good understanding of the way they like to fight. He can also find help in an off-the-shelf orders book containing orders the commander previously approved. When the members of the command group arrive, they will have more time to analyze and refine the COAs that have already been developed. Members of the planning group can then incorporate their expertise in the various battlefield operating systems into the further development of the COAs.

Analysis of the Courses of Action. The S-3 Air may assemble the planning group and lead the COA analysis. The final product is a recommended course of action and the results of the group's wargaming analysis. The S-3 and the commander will conduct their own analysis and make a decision, of course, but if the planning group has conducted an initial analysis, any obvious flaws or improve-

ments can then be addressed before the decision briefing to the commander, once again saving time in the planning process.

The Operation Overlay. Once the commander has selected a course of action, a graphic overlay of the operation must be prepared as quickly as possible. This overlay is an essential reference for each element of the planning group. The FSO, for example, must know the general route and the planned positions before he can plan targets in support of the operation.

The commander and the S-3 can make a rough sketch of the control measures to be used (preferably with water-soluble markers), from which the S-3 Air can then prepare the final graphics. He can add appropriate names to the various control measures as most units have an SOP to ensure common understanding of terms. He must ensure that everything is written or drawn clearly before reproduction. If time is very limited, the commander may be able to sketch only portions of the operation, and the S-3 Air can add other necessary elements, such as routes to deploy from the assembly area or mortar positions.

While the S-3 Air completes this task, the S-3 is free to supervise the preparation of all elements of the order. In addition, if S-3 and the commander have to attend a brigade rehearsal or "sticker drill," the planning process can continue while they are away.

Assembly, Reproduction, and Issue of the Order. Assembling pieces of paper, reproducing them, and issuing them to the various task force elements is not a difficult task, but it is a critical one. A company that does not receive the engineer annex, for example, may maneuver directly through a friendly obstacle and suffer casualties.

The S-3 Air has a thorough understanding of what the order should contain and can therefore ensure that it is complete before beginning reproduction. He can also act as a "quality control" inspector while copies are being made. Finally, he can issue the order to all elements of the task force in order of priority. For example, he can have all elements sign for copies of the order as they enter the tactical operations center

(TOC). The operations NCO can also perform these duties under the supervision of the S-3 Air. If there are any questions during the reproduction process, the S-3 Air should be able to answer them.

The Order Briefing. Since the S-3 Air has prepared the operation overlay, he should also prepare the operational sketch for the order briefing. Normally, the sketch is no more than the operations graphics superimposed on a larger background without a map. A large sketch illustrates the plan in far greater detail than a 1:50,000 map with overlay. The sketch must clearly portray all control measures, objectives, obstacles, planned targets, and CSS locations.

Additionally, the S-3 Air may brief portions of the scheme of maneuver, allowing the S-3 and the commander to listen to the order, review it, and address any issues that are not presented clearly. Since they have a clear understanding of the plan, the S-3 and the commander are more likely to leave out parts of it as they brief, assuming that others also understand it. If they stay in the audience for a portion of the briefing, they can make sure the plan is presented fully and clearly.

The Terrain Model. Having drawn the operation overlay and the briefing sketch, the S-3 Air is probably also best able to prepare the terrain model for the task force rehearsal. All members of the planning group should then add their respective elements to the terrain model. For example, the FSO should add the appropriate targets so they are visible and can be referred to during the rehearsal. The S-3 Air coordinates the contributions of all elements to the terrain model and ensures their accuracy.

The Rehearsal. If the S-3 Air leads the rehearsal, the commander and the S-3 can again be part of the audience and observe with some detachment and ensure that the plan is complete and well synchronized. The S-3 Air should use the decision support template to conduct the rehearsal, addressing each BOS element during all phases of the operation.

The Battle Captain. As the battle captain, the S-3 Air can help control and coordinate actions on the battlefield from the TOC, in accordance with the commander's guidance and orders. He also receives most of the reports from the various task force elements. As a primary element of the "second team," the battle captain must completely understand the scheme of maneuver. Except for the commander, the XO, and the S-3, the S-3 Air probably understands the operation, its various BOS elements, and how they are synchronized better than anyone else in the battalion task force.

Someone in the battalion task force must complete all of the tasks listed, and often it is the S-3 Air. The duties and responsibilities I have offered here are only suggestions, but they are suggestions that have proved successful during many CMTC rotations.

Lieutenant John R. Rosenfeld served as S-3 Air with the 1st Battalion, 15th Infantry, 3d Infantry Division, in which he also served as scout and Bradley platoon leader. He is a 1989 ROTC graduate of Norwich University and is now attending the Armor Officer Advanced Course.

The Leadership Role
Of the Company Executive Officer

LIEUTENANT PATRICK M. WALSH

Leadership, according to the Army's operations doctrine, is the most essential element of combat power, "the process of influencing others to accomplish the mission by providing purpose, direction, and motivation." The 10 principles of leadership provide additional guidance:

- Know yourself and seek self-improvement.
- Be technically and tactically proficient.
- Seek responsibility and take responsibility for your actions.
- Make sound and timely decisions.
- Set the example.
- Keep your subordinates informed.
- Develop a sense of responsibility in your subordinates.
- Ensure that the task is understood.
- Build the team.
- Employ your unit in accordance with its capabilities.

The Army identifies specific traits, standards, and actions that are necessary for a successful leader; and it includes these same traits, standards, and actions as critical elements of evaluation reports for both commissioned and noncommissioned officers. Yet Army leaders, all too often, measure their success solely by the principles of leadership and by the often-heard "BE, KNOW, DO."

Like his commander, a platoon leader is in a direct leadership role. He must lead his platoon to accomplish its mission by providing purpose, direction, and motivation, or the *why*, the *what*, and the *will*. Both the platoon leader and the commander often must give their soldiers the *why* under dangerous circumstances. The commander delivers the direction, or the *what*, in a very detailed five-paragraph operations order. The platoon leader, like all successful leaders, gives soldiers the motivation, the *will*, to accomplish their mission.

The organization of the Army does not allow every officer to be in a direct leadership role; battalions have staffs, and companies have executive officers. But Army doctrine on leadership seems to ignore staffs and executive officers. (The only publication available on the subject—Field Manual 101-5, *Staff Organizations and Operations*—deals entirely with structure.)

A former platoon leader who becomes a company XO therefore experiences a drastic change. He is no longer responsible for directly providing purpose and motivation to a platoon. Instead, he coordinates logistics, maintenance, medical, and food service support. The only time he exercises a direct leadership role is when the commander is absent.

Because day-to-day operations of the Army involve interface between personnel, all Army leaders use some form of direct and indirect leadership, and the Army does address indirect leadership at the senior level. Senior leaders work with fewer people and a greater number of things. Staffs and executive officers, because of their limited interaction with personnel, must also rely primarily on an indirect leadership style. The company XO, although not in a senior position, fits into this category.

The Army's leadership doctrine is based on four factors that are always present: *The led, the leader, the situation*, and *communications*. Too often, the focus is on the leader (the Army tends to get wrapped up in what the leader must BE, KNOW, and DO), but the other three factors are equally important. The company XO can take this foundation for the Army's leadership doctrine and adapt it to his situation:

The Led. The first major factor is the soldiers the XO is responsible for leading. Each soldier is different:

- The supply sergeant, usually the veteran member of a company headquarters section, is a knowledgeable professional who understands his job, and the XO's as well.
- The communication sergeant and the nuclear, biological, chemical (NBC) sergeant are also knowledgeable professionals in their fields, but they are often relatively junior NCOs with limited experience in staff operations.
- The training sergeant is usually chosen by the commander and works directly with him, while the XO assists with tough missions.
- The armorer and the motor sergeant are the least knowledgeable and usually the most junior members of the headquarters section; they fill their positions because of qualification, interest, or ability.

With this staff, the XO must create a climate that encourages participation and initiative. He must show the staff his confidence, respect, and trust; and he must see that they get the appropriate written counseling, performance appraisals, and awards.

The Leader. The second major factor of leadership is the leader himself. A company XO usually has trouble relin-

quishing this leader aspect. He often tries to assert authority over the platoon leaders and tries to run his staff the same way he ran his platoon. The XO may not be able to apply all of the principles and attributes of BE, KNOW, DO; his job is very technical, and he may have to rely more on the staff.

The Situation. In addition to getting used to a professional staff of sergeants, an XO must also adapt to the situation. He cannot expect to have as much control over the staff as he did over a platoon. For one thing, the XO's staff is not a formal organizational unit, and he has no explicit control over the commodity area sergeants. Leadership techniques that proved effective for a platoon leader often result in failure for an XO. The XO's job changes from day to day. The situation may require immediate action, or it may require a group effort from a collaborating staff. The situation often allows the XO to correct his mistakes and learn from them.

Communication. Communication is the factor of leadership that can make or break a company XO. To a platoon leader, effective communication implies that the soldiers listen to him and understand him. But an XO must have two-way communication channels. The staff members must understand precisely what he is trying to tell them, and he must understand precisely what they are trying to tell him. A good climate for communication consists of a reliable source, a clear and concise message, and a position of response.

An XO needs to rely on communication with his staff. Since it is difficult for him to get the diverse commodity area proponents together for a single meeting, he must establish a method of keeping up with all the areas. One technique is an organizational chart with places for messages. Another is a list of detailed responsibilities so that all communications are written in report or memorandum format.

Communication does not stop with reports and information but goes on to perceptions and expectations as well. An XO needs to be concerned with suggestions, dislikes, understandability, discussion, and the distribution and filing of reports.

A company XO who uses management by objectives in his planning and organization has all the prerequisites for functioning communication. This kind of management gives the intended recipient of communication access to the experience that enables him to understand and execute the mission.

These four major factors of leadership are always present, but the focus shifts drastically as an officer goes from platoon leader to executive officer. The most important of these factors for a platoon leader may be the leader element, while the most important factor for an XO is probably communications. Every task and mission is a different situation that requires a different leadership approach.

Although the Army has not addressed company XOs with its leadership doctrine, the XO cannot let this hinder his mission accomplishment. Through self-assessment, study, and experience, he will improve the understanding of his leadership role.

The XO may be concerned with purpose, direction, and motivation, but an experienced professional staff presents him with unique opportunities—staff members' understanding of their purpose, the direction of what they must do, and their self-motivation. The XO, on the other hand, may be more concerned with communicating necessary information and the situation at hand. By combining his talents and experience with the skills and motivation of the staff, he can produce a team that can best support the unit, its leader, and its soldiers.

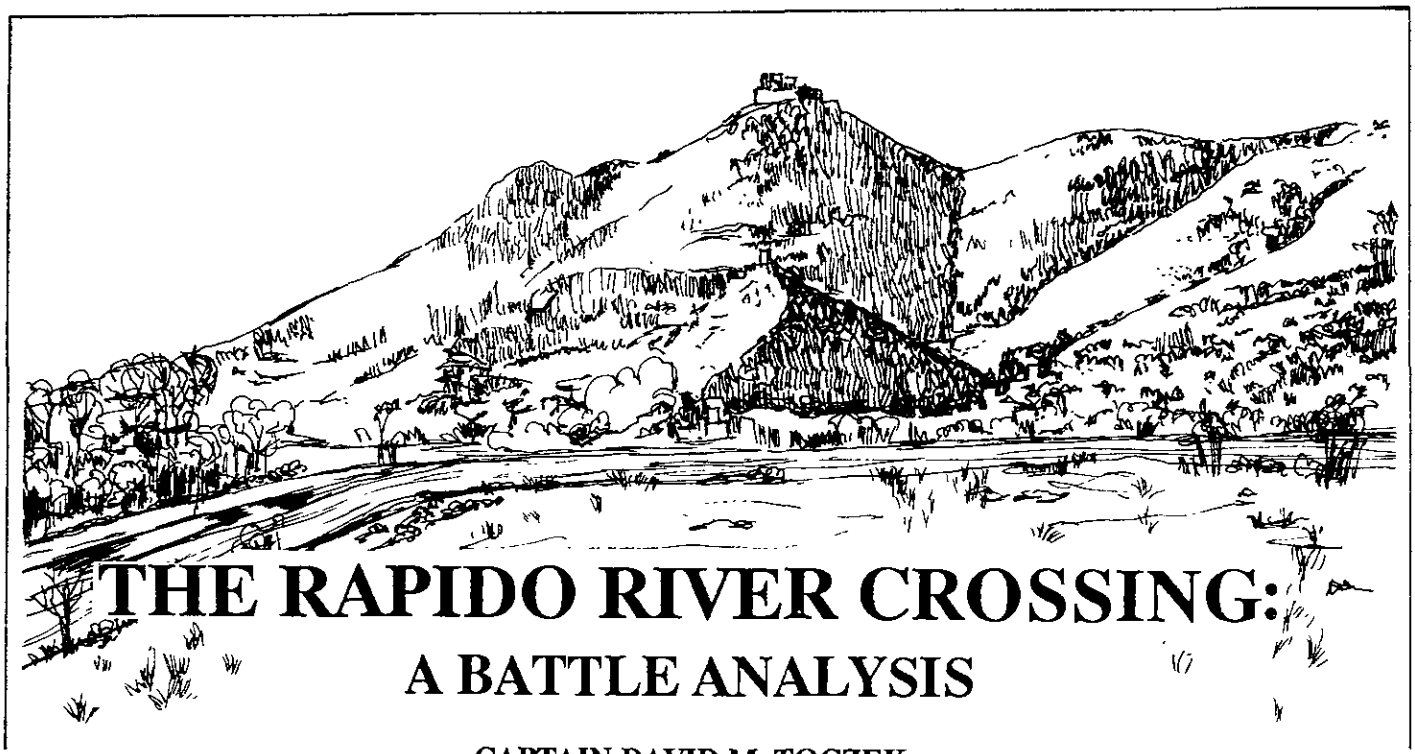
Lieutenant Patrick M. Walsh served as a company XO in the 5th Battalion, 502d Infantry, Berlin Brigade, and is now the battalion's S-3 liaison officer. He is a 1990 graduate of the United States Military Academy and holds a master's degree from the University of Southern California.

FIFTY YEARS AGO IN WORLD WAR II
NOVEMBER–DECEMBER 1943

In the closing months of 1943, the Axis powers were reeling under the relentless pressure of the Allies. U.S. soldiers, sailors, and Marines were regaining control of territories seized by Japan at the outset of the war, while the Russian counteroffensive was rapidly gaining momentum, halting or repulsing German advances. With the capitulation of Italy's armed forces, Allied commanders could concentrate still more combat power against tenacious German forces defending along the Gustav Line. The mounting list of Allied victories was a tribute to the self-sacrifice, heroism, and patriotism of the fighting men and women of the United States and her Allies.

These and other highlights of World War II are drawn from Bud Hannings' landmark research text, A Portrait of the Stars and Stripes, Volume II (available for $50.00 from Seniram Publishing, Inc., P.O. Box 432, Glenside, PA 19038).

1 November	The U.S. invasion of Bougainville gets under way, with the First Marine Amphibious Corps hitting the beaches shortly after sunup. The landings are supported by heavy air and naval bombardment. The Americal Division will replace the Marines in mid-January, and Bougainville will be secured by the end of April 1944.
5 November	The 2d Raider Battalion repulses a savage Japanese attack on Bougainville, then joins the 9th Marines to advance on one of the two primary trails on Cape Torokina.
11 November	During bitter fighting near Mignano, Italy, PFC Floyd K. Lindstrom engages attacking Germans with a machinegun. Though his unit is outnumbered 6 to 1, he charges the enemy, killing two with his .45 pistol. Rapidly changing positions, he captures a German machinegun and ammunition and succeeds in breaking up the enemy's assault. He is later awarded the Medal of Honor posthumously.
20–23 November	In some of the bloodiest fighting of the war, Army and Marine forces assault Makin and Tarawa Atolls. The 2d Marine Division sustains staggering losses, more than 30 percent in some units, but continues the fight. Heavily reinforced, the Marines secure Tarawa by 23 November, having lost more than 1,100 killed and 2,300 wounded. Only 17 of the 4,500 Japanese defenders survive. The Army's 165th Infantry repels a determined counterattack and presses the offensive, capturing Butaritari Island by 10:30 on the 23d.
8–16 December	The 36th Infantry Division sustains heavy losses in fighting around San Pietro, Italy, finally capturing the town on 16 December. The 3d Ranger Battalion captures Hill 950, two miles north of San Pietro, in a [illegible], against heavy resistance.
28 December	Units of the 36th Infantry Division continue to advance on San Vittore and are halted by stiff German resistance. The 34th Division relieves the 36th on 31 December.



THE RAPIDO RIVER CROSSING: A BATTLE ANALYSIS

CAPTAIN DAVID M. TOCZEK

On 20 and 21 January 1944 the 3d Battalion, 143d Infantry Regiment, 36th Infantry Division, attempted to cross the Rapido River near Sant'Angelo, Italy. In this effort, it faced fierce resistance from elements of the German 15th Panzergrenadier Division and failed in two attempts to cross. While there were many circumstances surrounding this costly failure, the 3d Battalion was unsuccessful partly because it was unable to concentrate enough combat power at a decisive point.

By early 1944 the United States and her Allies had firmly seized the initiative in the Mediterranean theater. First landing in North Africa in November 1942, U.S. and Allied forces had pushed the Axis forces from the continent by early 1943. In July 1943 Allied forces had landed on Sicily and within two months had driven the Axis forces onto the Italian mainland.

On 9 September 1943 the U.S. Fifth Army, under the command of General Mark Clark, landed at Salerno. The invasion force, code-named Operation AVALANCHE, consisted of the British 10 Corps and the U.S. VI Corps. After successfully landing, the Fifth Army began its slow progress up the peninsula. Facing fierce resistance, the Allies had to wrest each foot of soil from the German defenders.

By January 1944 the Fifth Army had moved to positions just east of the Rapido River (Map 1). Its subordinate elements consisted of the British 10 Corps, the U.S. II Corps, and the French Expeditionary Corps. With the impending invasion of Anzio by the U.S. VI Corps, General Clark intended to fix the German reserves along the Rapido and Garigliano Rivers. The British 10 Corps was to cross the Garigliano on 19 January and then secure the left flank of the U.S. II Corps. The 36th Infantry Division, a subordinate unit of II Corps, was to cross the Rapido on the night of the 20th. General Clark believed this attack would also open the Liri Valley to the tanks of Combat Command B, 1st Armored Division. Unfortunately, the British attack on the 19th failed, leaving the Germans in possession of the heights overlooking Sant'Angelo. The 36th would be attacking with its left flank dangerously exposed.

At this point, Major General Fred L. Walker, commander of the 36th, had two regiments at his disposal—the 141st and the 143d Infantry. (II Corps had held his 142d Infantry as a reserve near Mount Trocchio.) The 141st would cross on the division's right flank to the north of Sant'Angelo, while the 143d would cross at two sites to the south of the village. The 3d Battalion, 143d Infantry, was to cross the river at the division's southernmost site (Map 2).

The 3d Battalion had seen its share of combat. After landing on the Salerno beaches in September 1943, the battalion had fought its way up the peninsula. In early January 1944 the 36th Division was placed in reserve. Both battle and non-battle casualties had taken their toll on the 3d Battalion. Before the attack, it received replacements that brought it back almost to full strength. Although these new soldiers seemed to be trained and also received replacement equipment, they were not yet fully integrated into the unit.

In preparing for the Rapido crossing, the 142d and 143d regiments, originally selected for the assault, had rehearsed a river crossing on the Volturno River. (The unit commanders believed that this rehearsal was helpful, but the division commander questioned its value. The Volturno's banks, current, and depth were nothing like those of the Rapido.) Later, however, the 141st Infantry Regiment was substituted for the 142d, which left only the 143d with even this inadequate rehearsal. While the 3d Battalion, 143d Infantry, had rehearsed basic river assault techniques, it would be crossing the

Rapido with little or no practice.

Facing the 3d Battalion were elements of the German 129th Panzergrenadier Regiment and 115th Reconnaissance Battalion. Both belonged to the German 15th Panzergrenadier Division, commanded by Major General Eberhardt Rodt (Map 3). These units had taken part in the defensive battles all the way up the peninsula and were tired, but they were also well trained. Lieutenant General Fridolin von Senger, commander of the German XIV Panzer Corps, considered them his finest combat organization. Although the Germans did not have air superiority, they were well equipped and able to move their forces rapidly. The S-1 of the 3d Battalion, 143d Infantry, believed that both sides were on an equal footing before the engagement.

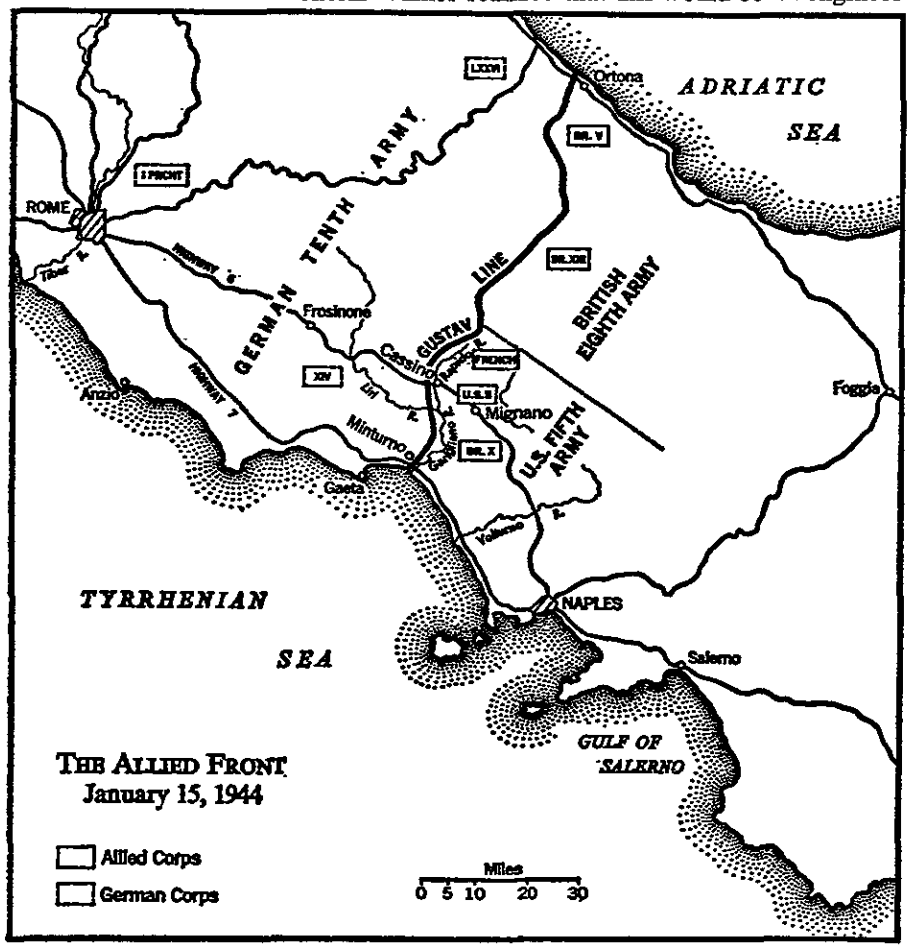
The area surrounding Sant'Angelo was a combination of mountainous heights and flat, level valleys. To the north-northwest, the Benedictine monastery atop Monte Cassino dominated the skyline and provided clear observation to the river. Heights to the south also provided excellent observation of the area. Between these ridgelines, the Liri Valley ran directly west toward Rome. To the northeast, Monte Trocchio overlooked the river. Running north to south, a small valley separated Monte Trocchio and Monte Cassino. The Rapido River lay at the center of this valley.

Although the Rapido did not look impressive, it was a formidable obstacle; it was 25 to 50 feet wide and nine to 12 feet deep, with banks of three to six feet. It was unfordable and the river's swift current would make it difficult for soldiers to even cross by boat.

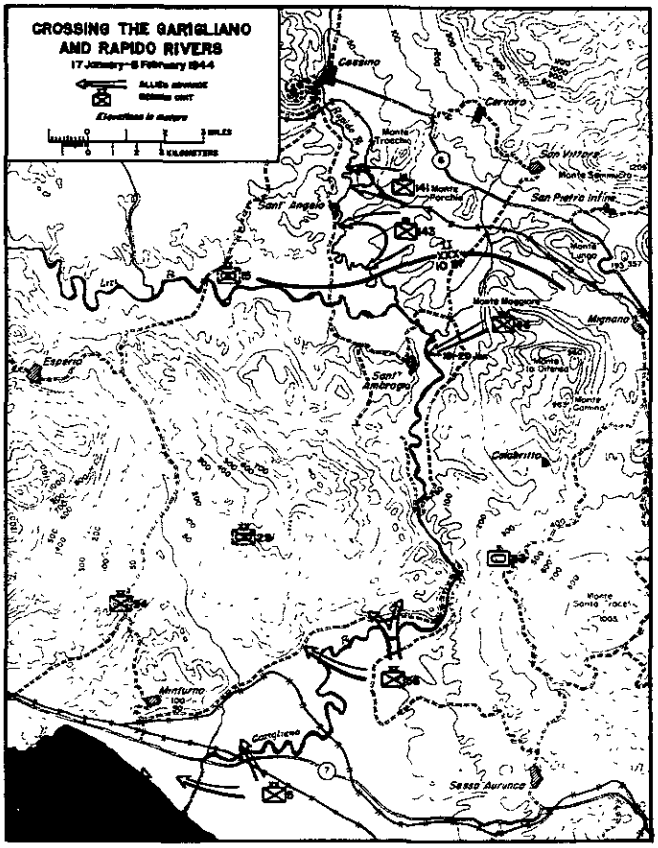
As for the weather, the winter of 1943-44 was much the same as other Italian winters. Temperatures averaged 25 to 40 degrees Fahrenheit. It rained nearly every day in November and December, and the terrain was a muddy morass. Almost daily at 1700, thick fog blanketed everything in low-lying areas and remained until it burned off at about 1000 the next day. Both the terrain and the weather reduced observation and trafficability for both sides. Sant'Angelo sat on a 50-foot bluff directly overlooking the Rapido. The German commander capitalized on this position and made the village a strong point. Each building contained prepared fighting positions that gave the defenders excellent cover and concealment. Concrete machinegun emplacements were prepared both inside and outside the village.

Not satisfied to defend just the town, the Germans cleared all vegetation 100 yards from the banks on both sides of the river. They also emplaced double-apron wire on the north side, just short of their fighting positions, and reinforced these obstacles with a minefield one mile deep that straddled the river. The minefield included antipersonnel and antitank mines and wooden box mines, and considerable engineer effort would be required to clear lanes through it to the river and beyond. Clearly, the 3d Battalion faced a well-prepared and dangerous foe.

General Walker realized that this would be an engineer-



Map 1. (From *Bloody River: The Real Tragedy of the Rapido*, by Martin Blumenson, Houghton Mifflin, 1970.)



Map 2. (*From Salerno to Cassino*, by Martin Blumenson, Office of the Center of Military History, 1969.)

intensive operation. He placed the 1st Battalion, 19th Engineer Combat Regiment (minus one company), and Company B, 16th Armored Engineer Battalion in support of the 143d Regiment. The 3d Battalion received one engineer company for the assault.

On 19 January the 111th Engineer Battalion cleared lanes through the German minefield to the river and marked them with cords so the units following could pass through easily. But the 111th did not coordinate with the engineer units that would be making the assault. Besides, the Germans heavily patrolled both banks of the river and relaid the mines or moved the lane markers.

At the same time, the 143d Infantry moved to its assembly areas at the base of Monte Trocchio. Almost 1,000 yards of flat valley lay between the 3d Battalion's assembly area and the river.

On the morning of 20 January, the XII Air Support Command flew 124 sorties in support of the Rapido crossing. P-40s and A-20s bombed near Sant'Angelo and Cassino. A larger support effort was impossible because of the imminent landings at Anzio and the support the British 10 Corps needed at its Garigliano bridgehead.

H-Hour was set for 202000 January; the line of departure was the Rapido River. The 3d Battalion was to depart the assembly areas just after dark, but it could not leave until the assault boats for the infantry arrived. Fifteen battalions of artillery from the II Corps and 36th Division fired a 30-minute preparation on schedule beginning at H - 30. By the time the battalion began moving, however, the preparatory fires had ceased and it had to move without fire support. Forward observers could not adjust fires because heavy static interfered with radio reception.

The battalion's companies left in column, with Company K leading, followed by Company I, then Company L. Guides from the 19th Engineer Combat Regiment led the units through the narrow lane. Company K carried assault boats—pneumatic, wood, or canvas—for the initial assault. Once they had established a bridgehead, the engineers planned to construct the wooden catwalk whose sections were being carried by Company I. By 1900, the usual dense fog settled over the valley and reduced visibility almost to zero.

As the battalion snaked forward, the boats and the bridge weighed heavily on the soldiers. After moving 500 yards, the soldiers' engineer guide announced that they were no longer inside the lane and that he was lost. Battalion commander Major Louis Ressijac, who was with Company K, moved forward, conferred with the company commander, and attempted to pinpoint his location. Then he called for the battalion engineer officer, who responded that he did not know the route, and that the platoon that had cleared the lanes had left the area the day before. The supporting engineers then brought up mine detectors and began the painful process of clearing a lane.

By this time, the Germans had responded to the activity to their front and were pouring indirect fire into the valley. Both personnel and equipment, especially the pneumatic boats, took heavy casualties. As the engineers cleared a lane, one soldier detonated a mine, resulting in more casualties. The effects on the other soldiers were devastating. Panic spread among the assaulting troops. The leaders had lost effective control of their units.

The battalion S-3 requested that the battalion return to its assembly area, but the regimental commander, Colonel William H. Martin, ordered that the assault continue. At 0010 on 21 January, Major Ressijac informed regimental headquarters that he still did not know where the river was and that he had only five serviceable boats left. At 0500, Colonel Martin ordered Lieutenant Colonel Paul D. Carter to take command of the battalion. Colonel Carter protested, saying he did not have enough knowledge of the situation or of the battalion to take command. Nevertheless, he assumed command of the 3d Battalion, 143d Infantry Regiment, at 0515.

At 0630, ten and one-half hours late, the 3d Battalion reached the Rapido. With the sun rising, the battalion, with its five serviceable boats, headed back to the assembly area at the base of Monte Trocchio at 0645. Its first attempt to cross the Rapido had failed miserably.

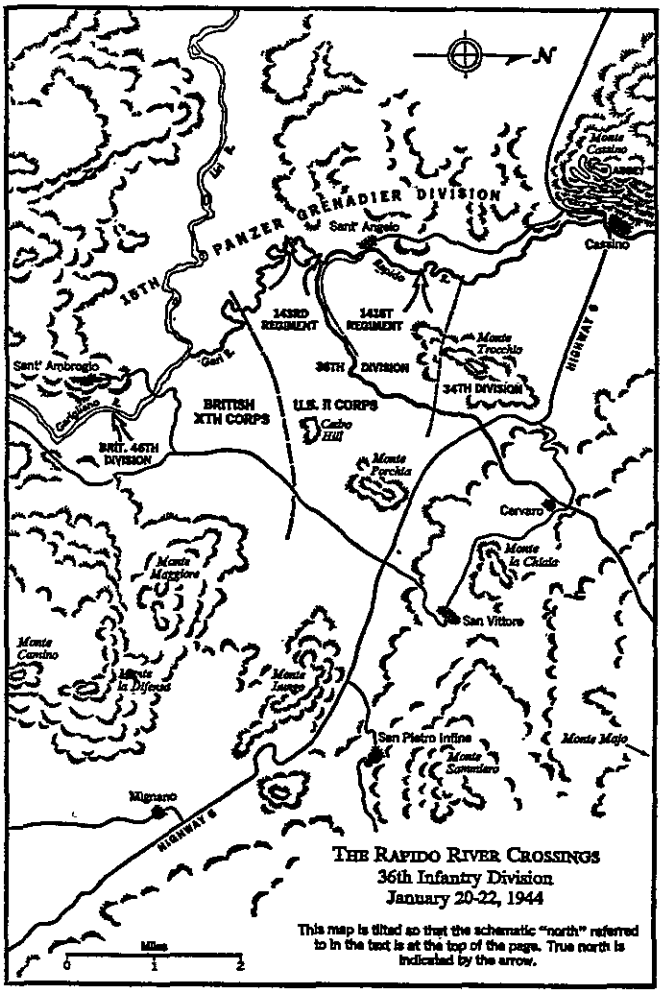
At a meeting at the 143d's regimental command post, Colonel Martin issued new guidance to his battalion commanders. The 760th Tank Battalion, attached to the regiment, would now fire across the river without positively identifying its targets. Also, Colonel Martin discussed the numerous stragglers who appeared during the assault, men "who complain and try to return to the rear under pretense of illness." The regiment would try again to cross the river later the same day.

At the 3d Battalion's command post, Colonel Carter directed that the battalion attack farther south, this time with two companies abreast. Company K would lead, with Company I crossing on its right (north) flank, while Company L would follow Company K.

At this point, the balance tipped in favor of the Germans. Although 3d Battalion had not been in contact, it had undergone both the physical exertion of carrying the assault equipment and the emotional stress of negotiating the minefields.

By late afternoon, the engineers still could not push forward all of the assault boats that were needed. As a result, the battalion was again forced to attempt a crossing at a single site. This second try came at 1600 on 21 January. Visibility was good, and the 3d Battalion found its crossing site without difficulty. By 1700, Company K was on the far side of the Rapido. Following swiftly, Company I was across within 45 minutes as well. Moving onto the flat approaches to the river, both companies ran straight into the Germans' interlocking machinegun fire. Indirect fire from the German mortars and field artillery also pounded the pinned-down soldiers. The 3d Battalion had a foothold but was unable to expand it quickly.

Although two companies had crossed in a short time, there were still problems at the river. Because of the swift current, the soldiers used communication wire to pull the boats across. With nightfall, they could not tell which wire was for communication and which was for the boats. Consequently, since the radios did not work, communications from the lead elements to the rear were almost nonexistent, and any communication had to be by messenger.



Map 3. (From *Bloody River: The Real Tragedy of the Rapido*, by Martin Blumenson, Houghton Mifflin, 1970.)

By 1830, Company L and the battalion's mortars had also crossed to the far side and the battalion had a bridgehead about 500 yards deep. As it moved west, the battalion hit more mines, and the German artillery intensified. The soldiers were pinned down under the withering enemy machinegun fire. Maneuver was impossible. With no communications, forward observers could not call in suppressive fires. Formerly cohesive units broke into small groups of men intent only on survival. The 3d Battalion had ceased to exist as an organized unit. More and more soldiers found one reason or another to recross the river.

By 0330 on 22 January the 3d Battalion's S-1 was the senior officer on the far side, and he returned to the near side to link up with the 2d Battalion, which had been committed just before midnight. With the crossing of the 2d Battalion, the Germans intensified their efforts to dislodge the bridgehead. With daylight coming fast, the U.S. forces had to determine quickly how they would expand their salient. Before they could do so, the Germans seized the initiative, counterattacking at 1000 and clearing the weakening resistance on that side of the river.

The U.S. soldiers who could recross the river did so, and most of those left on the far side were not seen again. Survivors trickled back to the battalion's assembly area. In all, the 3d Battalion, 143d Infantry, had lost 268 men. The attempts to cross the river had been expensive indeed.

Such a terrible defeat can be explained in many ways. One way is through an analysis of the battalion's combat power. Combat power, a unit's ability to fight, includes maneuver, firepower, protection, and leadership. An examination of these four elements illustrates why the battalion was unable to cross the river successfully.

Maneuver—the movement of forces in relation to the enemy to secure or retain positional advantage—is the means by which units concentrate their forces at the critical point. Mobility is generally, but not always, associated with maneuver. The 3d Battalion's ability to maneuver was impaired by a number of factors.

First, the battalion could not maneuver when it reached the far side of the river because of the Germans' minefields and intense mortar and machinegun fire. Small units could neither call for fire nor provide enough suppressive fire to be able to move against the German positions. As a result, they lost their momentum and suffered heavy casualties.

Second, the engineers could not construct the necessary bridges to cross supplies and tanks, and the two footbridges they built in the battalion's area did not last long under the intense German artillery fire. Little ammunition resupply came forward, and this compounded the forward elements' problems with suppressive fire. Further, with such a small

bridgehead, the crossing site was under direct observation and fire, which made it impossible for the engineers to build the Bailey bridge necessary for the tanks to cross. Both the German defensive positions and the steep river banks themselves prevented the battalion from concentrating its efforts through maneuver.

Massing firepower on an enemy—the destructive force essential to defeating the enemy's ability and will to fight—can quickly bring an engagement to a close, but unfortunately, the 3d Battalion could not mass its fires, suffering instead from the massed fires of the Germans. Little help came from the Army Air Force, which flew only 124 sorties in support of the crossing. Although 15 battalions of artillery did fire in support of the crossing, the scheduled fires ended before the battalion reached the river; observed fires could not be called in by the forward observers because of the difficulties with both FM radio and wire. The effective suppression of the German positions and the massing of artillery fires were therefore impossible.

The attached tank units were also unable to influence the engagement with their firepower. The swampy terrain along the river prevented them from getting close enough to the banks to fire. With only optical sights, they could not effectively engage targets during periods of limited visibility. They could not cross the river to fire at close range because there was no bridge. The infantrymen on the far side were on their own. While the 3d Battalion had the assets to mass firepower on the German positions, it could not bring these assets to bear on those positions.

Another element of combat power—protection—was lacking as well; the assaulting forces could find little cover and concealment during their 1,000-yard movement from their assembly area to the river, and the flat approaches to the river itself did not afford much more. In addition, although the engineers had cleared lanes through the minefields earlier, the Germans had closed or moved many of those lanes. The men of the 3d Battalion had to find whatever protection they could under their steel pots.

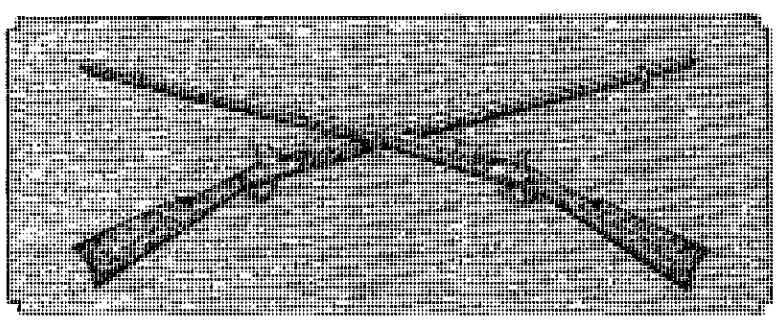
The assault boats and foot bridges the battalion carried also reduced its fighting potential. The boats weighed 410 pounds each; they could not be pre-positioned at the river because the trucks could not get through the mud. The soldiers had to carry all of their assault equipment the full 1,000 yards across the valley. They were exhausted by the time they reached the river, even before the actual crossing and fighting took place. Once again, circumstances conspired against the 3d Battalion.

The area in which the 3d Battalion was most lacking was leadership—the element of combat power that provides purpose, direction, and motivation in combat. The battalion's leadership was hampered by General Walker's lack of confidence in the upcoming attempts to cross the Rapido. He wrote in his diary, "We are undertaking the impossible, but I shall keep it to myself; however my . . . battalion commanders are no fools." The division adopted his sentiments. An officer of the 36th Division later stated that it was common knowledge the division would not be able to cross because of the Germans' strength.

Motivation was also clearly lacking among the soldiers. Colonel Martin's comments on 21 January about the number of stragglers also hint at this problem. In addition, the soldiers did not feel confident of their ability to fight at night, a clear training deficiency. An engineer interviewed after the crossing attempts said, "The infantrymen I talked with didn't like night fighting and lacked confidence in their ability to knock out the enemy in a night engagement." Another officer put it even more succinctly when he said that engineers can't put infantry across a river if they don't want to go. Fighting at night and against a strong enemy, the battalion needed strong leadership, and that leadership was clearly lacking throughout the two attacks.

The failure of the 36th Infantry Division to force a crossing of the Rapido River was a result of many factors, including a well-trained and entrenched enemy, poor coordination, inaccurate information on terrain and minefields, and poor soil trafficability. Due to these and other reasons, the Division was unable to concentrate a preponderance of combat power at the critical point and time, and therefore sustained heavy losses in men and equipment. The lessons of the Rapido crossing are many and are well worth the attention of leaders who may some day have to press the attack across a water obstacle to dislodge an enemy as tenacious as those facing the 36th Infantry Division in January 1944.

Captain David M. Toczek conducted a commander's staff ride to Cassino, Italy, in 1991. While assigned to the 3d Battalion, 325th Infantry, he led a rifle platoon and served as company executive and battalion adjutant. He is currently a senior platoon trainer in the 2d Battalion, 11th Infantry, at Fort Benning. He is a 1988 graduate of the United States Military Academy.



OPERATIONS IN SOMALIA
CHANGING THE LIGHT INFANTRY TRAINING FOCUS

CAPTAIN PATRICK D. McGOWAN

Earlier this year, the 1st Battalion, 22d Infantry, 10th Mountain Division, deployed from Fort Drum, New York, to Somalia to conduct security operations as part of a United Nations effort. The U.N. had intervened to gain control of the population and food distribution assets to prevent widespread starvation. The major problem was that Somalia did not have a centralized government; instead, it had various "warlords," none of whom controlled enough of the resources to ensure stability.

To stabilize an area such as this—according to Field Manual 7-20, *The Infantry Battalion*—a commander must control both the people and the resources that are valuable to them. In this case, the resources that contributed to feeding the people consisted of seaports, food storage warehouses, field kitchens, food distribution centers, and the roads on which the food convoys traveled.

Initially, our battalion was responsible for a large sector in which we conducted critical site security at the port of Marka, escorted the food convoys of non-governmental organizations (NGOs), and secured checkpoints and roadblocks. We responded to security threats throughout the sector and ensured that critical relief supplies reached the food distribution centers. Later, we would become the theater's quick-reaction force based in the city of Mogadishu.

These first operations in Somalia were totally new to the battalion; they provided us with our first opportunity to execute real-world contingency combat operations. We conducted peace enforcement operations within the spectrum of low-intensity conflict and found that our training back at Fort Drum had not fully prepared us for the realities of a peacetime contingency operation. This deployment involved us simultaneously in security missions and offensive operations.

Our experiences raised certain questions about our training programs. One of these questions concerned the development

of scenarios at the Joint Readiness Training Center (JRTC), because it was these scenarios that had determined our training focus, which was on operations in low- to mid-intensity conflicts. Clearly, we needed to reconsider our mission essential task lists (METLs) so we would be better prepared for future contingency operations. And the same is probably true of other light infantry battalions as well.

Although Somalia was a low-threat environment, the bandits, clans, and civilians in general presented us with a wide range of situations—from providing medical assistance and security for food distribution centers to potentially dangerous urban house-to-house clearing operations.

Initially, it was easier for us to deal with the most dangerous of these missions—entering and clearing a room or knocking out a bunker—because these were battle-focused tasks in which we had trained extensively. It was considerably harder for us to handle the low-threat tasks of running a checkpoint or securing a seaport, because these tasks involved dealing with various types of civilians in ways we had not encountered in training.

Our combat infantry soldiers had to deal with civilian crowds that could turn into unruly mobs at any moment. In such situations, they had to use less force and more persuasion to maintain control. For example, they had to keep Somali women and children from stealing cartons of cooking oil from the food transfer points. Such attempts to keep people from interfering with the assistance efforts required both firmness and compassion.

In our follow-on mission as quick-reaction force out of Mogadishu, the overall mission was to ensure that a system was set up to get the food and medical supplies to the people. The civilian NGOs were responsible for the system, while the military units were responsible for security. Our combat infantry soldiers now faced a requirement to enforce security measures while also trying to convince Somali civilians of their good intentions, and this required diplomacy.

Providing security was not a major problem, because the battalion had conducted extensive squad and platoon training the previous year. The focus of this training was on such battle drills as conducting a squad attack, reacting to contact, and knocking out a bunker. As a result, the units had the basic building blocks for tougher tasks, but these tougher tasks were not the complex collective tasks normally associated with infantry training. Instead, they often involved controlling a volatile crowd or reacting to a sniper in a group of women and children.

In these situations, the measure of success was not the volume and accuracy of fire but the discipline, control, and level-headed thinking the soldiers displayed. Fortunately, our earlier training at Fort Drum had given our soldiers the confidence they needed to deal with stressful situations without overreacting.

Another factor that contributed to the battalion's success was a firm understanding of the commander's intent. That intent was simple and unchanging: Protect the force, and enforce the four *Nos*. These two simple statements appeared in every commander's intent in every operation order, and they greatly improved the performance of the soldiers and allowed them the flexibility they needed to deal with unexpected situations.

To protect the force and preserve the available manpower for operations, every leader strictly enforced the wearing of flak jackets and helmets and inspected to make sure the soldiers complied with the rules of sanitation. And everyone knew the four *Nos*: No technicals (armed Somali vehicles) or weapons, no banditry, no Somali roadblocks, and no looting.

In our role as the quick-reaction force, we were prepared to reinforce coalition units that needed help in their areas of responsibility. This occurred several times, but our first two operations were especially significant: Reinforcing a Belgian battalion in Kismayu and conducting combined operations with the Pakistanis in Mogadishu.

The first of these operations required that we deploy over

200 miles by C130 and UH-60 aircraft and five-ton trucks. A Somali warlord had attacked the city of Kismayu with the intent of recapturing it from an opposing warlord. The Belgians blocked several hundred militiamen who were trying to infiltrate the city at night. About 70 Somalis were killed and an unknown number wounded, and one Belgian soldier was wounded.

Our force was to conduct a search and attack operation in the area immediately outside the city. The concept of operation included locating any militiamen who might be contemplating another assault. This operation ended without any contact.

The U.N. headquarters then tasked us to relieve the Belgians in providing security in the city. The Belgians moved out of the city to conduct security operations in the northern part of their area of operation. As a result, we had to pick up responsibility for the NGOs and ensure continued stability in the streets of Kismayu.

This part of the operation was not without problems. The company commanders were faced with a mission of operating on urban terrain without much preparation time. Patrolling unfamiliar streets was a challenge in itself, and providing security for the civilians operating the relief efforts required the best from our soldiers and small-unit leaders. During this ten-day operation, we conducted cordon and search missions in an urban environment—patrols, roadblocks, checkpoints, and civilian disturbance control—requiring a high degree of flexibility and discipline among the soldiers and leaders. This operation emphasized mission-type orders, a firm understanding of the commander's intent, and a restraint of combat power to prevent undue civilian casualties.

The challenges we faced in Kismayu led us to shift our training focus. Since the United Nations headquarters required that only one rifle company be immediately available for reaction, we developed a training cycle that allowed one company each week to focus strictly on training.

After analyzing the actual missions required in peace enforcement operations, the commanders revised their METLs to show the following:

- Conduct a cordon and search.
- Assault a built-up area.
- Conduct an air assault.
- Establish a roadblock/checkpoint.
- Reconnoiter.
- Conduct a movement to contact/hasty attack.
- Conduct convoy operations.

Again, the battalion focused on training scenarios that involved civilians and unclear situations. They used helicopters to a great degree and conducted live fire assaults to prepare for an eventual call-out to help another coalition force.

Our second significant operation involved helping the Pakistanis in Mogadishu clear a warlord's headquarters and unauthorized weapon strongpoints. This operation required that the battalion react quickly, work with a coalition force, and execute several other tasks as well. The battalion operated in a MOUT environment, executed a cordon and search, patrolled streets, and set up roadblocks and checkpoints. This operation also required platoons to react to snipers and clear pockets of resistance.

In both operations, rifle companies and platoons executed missions with varying degrees of difficulty. The missions succeeded, but only after much concern and preparation.

Peace enforcement operations of the future are likely to be similar to those we faced—such operations as protecting the force, enforcing arms restrictions, knowing detailed rules of engagement in dealing with civilians, and ensuring that humanitarian relief efforts are secured. To meet those needs, we will have to have forces available that can quickly respond to emergencies or requests for reinforcements. The very nature of protecting the force and responding quickly will require us to reshape our METLs and the way we train on them.

In Somalia, we operated in a role of populace and resource control, conducting both security and offensive operations simultaneously. The typical light infantry evaluation scenario, however, takes a battalion from a low-intensity conflict to a conventional fight. Typical scenarios involve such training tasks as search and attack, defend, and infiltration attack. Although these are important missions, other tasks will be more in line with future operations—conducting cordon and search, operating in an urban environment, providing security for critical sites and NGOs, with the emphasis on rules of engagement and force protection. These missions will place great emphasis on dealing with civilians, processing prisoners, confiscating weapons, and attacking strongpoints within a built-up area.

We incorporated the tactical lessons we had learned in the first months of the deployment into our subsequent operations. I believe the light infantry training tasks we practice in our Army also need to change to reflect what we actually do. Instead of focusing on search and attack operations, we should train on peace enforcement operations that present a wide range of situations requiring leaders to think and solve difficult problems. This training would involve them in operations around cities, along roads, and in isolated areas where base camps might be located. We need to develop operational or evaluation scenarios that require units to secure populated areas and control resources. In these scenarios, units would use minimum force but would also be flexible enough to react strongly to armed aggression.

Training programs that focus on fundamental battle drills are right on target. When it comes to instilling confidence in soldiers, there is no substitute for realistic live fire training. But peace enforcement scenarios in low-intensity conflict are the ones we are most likely to face in future operations, and we must be ready to meet this challenge.

Captain Patrick D. McGowan served in Somalia as assistant S-3 of the 1st Battalion, 22d Infantry, and previously commanded companies in the battalion. He is now an observer-controller at the Joint Readiness Training Center. He is a 1984 ROTC graduate of Oregon State University.

Company Property Accountability

The Pillars of Success

LIEUTENANT CHADWICK W. STORLIE
CAPTAIN MICHAEL J. LENTZ

Supply accountability is an essential element of combat readiness. Having the right amount of equipment and all of its components is just as important as realistic, combat-focused training. Imagine a night attack on an enemy objective without tripods for the machineguns or head harnesses for the night vision devices.

Property accountability consists of several elements that can be seen as separate pillars supporting combat readiness, each complementing and strengthening the others. Ordering, tracking, and accounting for company property are not only key elements of combat preparedness—they are vital to a successful company command as well.

Supply References. Many supply references focus on proper company supply accountability procedures. The most important supply publications are in the current Unit Supply Update 13; Army Regulation (AR) 710-2, *Supply Policy Below the Wholesale Level*; Department of the Army (DA) Pamphlet 710-2-1, *Using Unit Supply System Manual Procedures*, and AR 735-5, *Policies and Procedures for Supply Accountability*. DA Pamphlet 710-5, *Unit Commander's Supply Handbook*, completes the list of most commonly used supply publications. In addition, most military installations have rules and regulations that govern supply accountability, and the supplementing ARs for further reference. A company

absolutely must have these references readily available as guides for all property transactions.

Equipment Publications. For every piece of equipment, there is a Technical Manual (TM). TMs come in various series (-10, -20, -23P and up), each reflecting the unit level of maintenance that applies. The TM -10 is the basic publication used for property accountability for most equipment; for sets, kits, and outfits (SKOs)—the unit armorer's tool kit, for example—supply catalogs are the basic accountability publications.

The TM -10 contains sections on operating and maintenance instructions, ammunition (if applicable), references, components of end item (COEIs), and basic issue items (BII) lists, additional authorization items (AAIs), and a list of expendable/durable supplies.

The COEI, BII, and AAI listings are the key sections used to determine accountability for an end item. The COEI section describes exactly what makes up each end items, using illustrations, National Stock Number (NSN), description and part number, unit of measure, and quantity required. The BII and AAI sections work the same way as the COEI section. For inventory and component hand receipt procedures, all of the items listed in the COEI, BII, and AAI sections must be reflected on the hand receipt. The presence of all COEIs and BIIs that are accountable make up a complete end item.

There are two ways to help ensure that proper, up-to-date publications are on hand:

- Obtain a printout of the current publications from the property book office (PBO). Most PBOs can provide this printout in seven to ten days.
- Obtain a list of all the publications required for unit maintenance and supply accountability Tables of Organization and Equipment (TOEs) from the U.S. Army Materiel Command (USAMC) Materiel Readiness Support Activity, ATTN: AMXMD-MP (EOPDB), Lexington, KY 40511-5101. Send a line item number (LIN) list with NSNs and names of the end items. The publication list should arrive in four or five days.

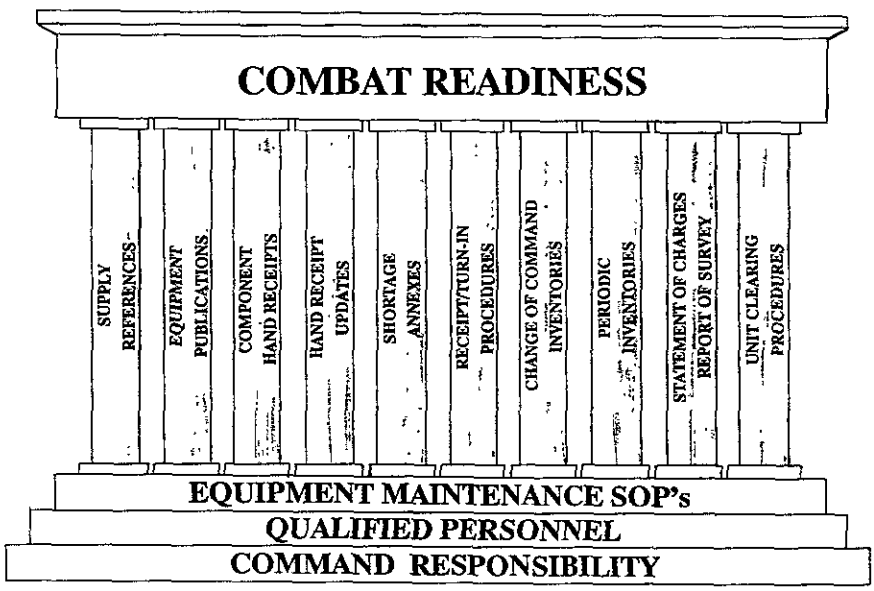
Hand Receipts. For each end item, there must be a component hand receipt from company supply to the hand receipt holder. Each hand receipt holder must then have a component hand receipt from him to the sub-receipt holder. The use of component hand receipts all the way from supply to sub-receipt holder ensures that the supply sergeant and all the hand receipt holders know exactly what they are responsible for. It also enables the supply sergeant, the primary hand receipt holder, and the company commander to reconcile the hand receipts quickly.

A separate DA Form 2062, *Hand Receipt*, should be used for each component hand receipt, with only one end item for each form. The "TO" box must state the hand receipt holder's name and Social Security Number, not just his duty position. The blanks for NSN, item description, quantity authorized, and quantity on hand must be completely and clearly filled in, as well as all the other information boxes.

Again, it is essential that the correct, current publication be used in listing all the items. For each end item that is hand receipted out on a regular basis, the company supply sergeant and the commodity area chiefs—communications; nuclear, biological, chemical (NBC); and arms room—should have extra copies of the form filled out in advance with all the components listed. If all hand receipts are prepared according to the publication listing, all property will be fully and accurately accounted for.

Hand Receipt Updates. AR 735-5 requires that hand receipts be updated at least once a year, but it is better to update them once a quarter. A recommended technique is to include complete inspections as part of the field recovery process. Whenever a hand receipt is updated, a complete inventory must be conducted.

When a hand receipt is updated, the items on DA Form 3161, *Request for Issue or Turn-in*, when used as a change document, must be taken into account. (The form adds components received or subtracts components destroyed or turned in for repair.) The old form should be marked with the date the hand receipt was updated, the hand receipt number, the name



of the hand receipt holder, and the supply sergeant's name; then it should be filed in a "completed" folder.

All missing items are accounted for through the statement of charges or report of survey process. Finally, the missing items are added to the company shortage annex kept with the battalion S-4 and then placed on order. A periodic update of hand receipts using a complete inventory process ensures an aggressive attitude toward property accountability at all levels of command.

Shortage Annexes. Shortage annexes are prepared by the battalion S-4 to reflect property shortages identified through inventory procedures to the company commander and by the company supply sergeant to the hand receipt holder. Shortage annexes from the battalion S-4 to the company supply room, which are signed by the battalion S-4, should reflect all items missing from the company. As components are received by the S-4 or turned in by the company supply sergeant, the S-4 issues a Form 3161 to the supply sergeant. The S-4 then files a copy of the form with the company shortage annex. The items on the accumulated forms are then added to or subtracted from the shortage annex when it is updated. The company shortage annex must be updated once every six months, but it is best to update it after each hand receipt update, or about once a quarter.

The items shown on all the forms are added to or subtracted from the hand receipt when it is updated. The old form should be marked with the date the hand receipt was updated, the hand receipt number, the name of the company supply sergeant, and the S-4 NCOIC's name, then filed in a "completed" folder of old Form 3161s for the company. A duplicate of this file should be kept by the company supply sergeant.

The company supply sergeant can issue the hand receipt holder a shortage annex signed by the company commander. The shortage annex should list all components the hand receipt holder is missing. The complete shortage annex, combined with a component hand receipt, will allow the supply sergeant, the hand receipt holder, and the company commander to verify that all missing components are on the shortage annex. The supply sergeant issues 3161s for components turned in or newly issued. These forms are added to the hand receipt during all hand receipt updates and then kept on file. The hand receipt holder can use the 3161 with all sub-receipt holders in the same fashion.

The most important advice on using the shortage annex is to maintain it accurately, incorporate and maintain on record all Forms 3161, update it after hand receipt updates, and compare it against the hand receipt, the end item publication, and the current shortage annex to make sure all shortages are accurately documented.

Component Receive/Turn-in Process. Components are received into the battalion through the battalion S-4. The S-4 then prepares a Form 3161 as a change document and issues it to the company supply sergeant. The supply sergeant and hand receipt holder then do the same, using the form until it reaches the user level. The reverse procedure, from user to S-4, is used for turning in damaged or unusable equipment. Copies of the form are maintained at each level for use in updating the shortage annex and the hand receipt during the next inventory of the end item and the subsequent hand receipt and shortage annex update.

Change-of-Command Inventory. A change-of-command inventory is important for both the incoming and the outgoing commander. For the one coming in, it is his first action within the company and his first impression of the company. For the outgoing commander, it is his final act as the commander and the end result of the property accountability procedures used during his tenure. The company leaders must therefore do their best to ensure a smooth transition of property accountability.

The incoming commander needs to focus on the inventory, ensuring that the proper publications are on hand and that component hand receipt procedures are being followed. All of these inventories must be conducted to the following standard:

All property is neatly laid out and displayed by end item and component, and the proper publications are on hand. The supply sergeant and all hand receipt holders are there with their hand receipts, the company organizational hand receipt, the shortage annex, and all applicable DA Forms 3161.

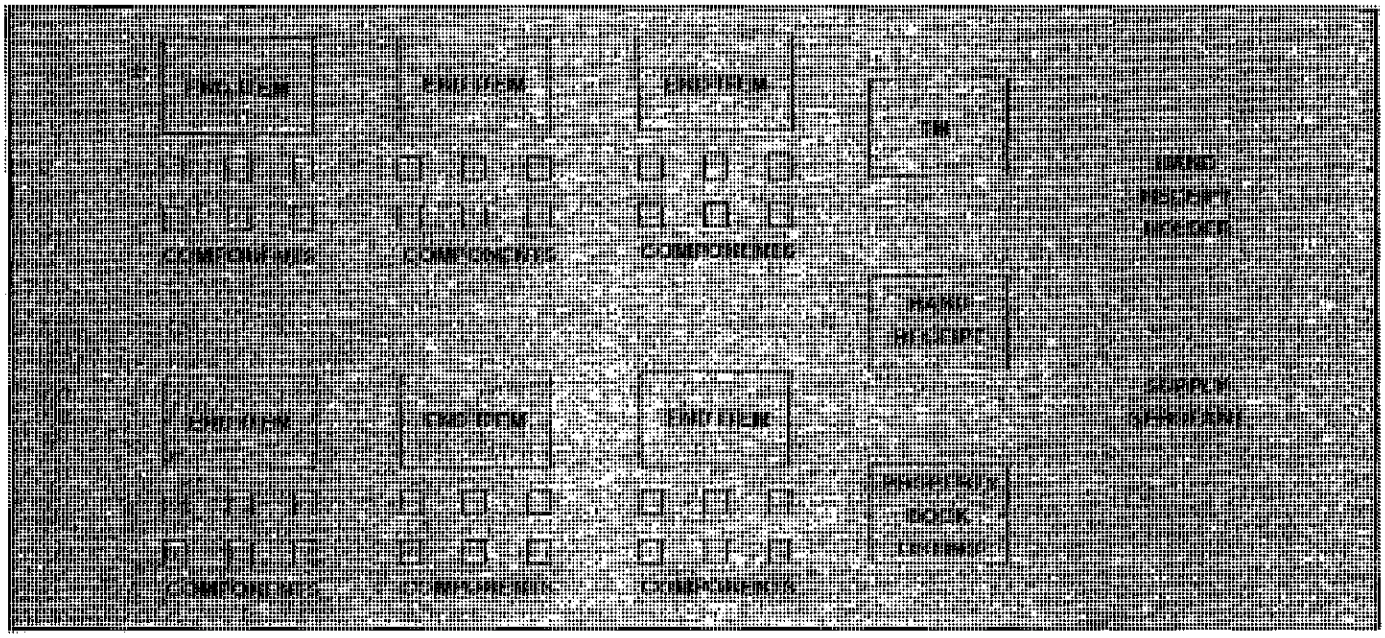
It is best to conduct the inspection by end item instead of by hand receipt, because this process reveals all the shortages in a particular end item. All hand receipts need to be component hand receipts that adhere strictly to the COEI, BII, and AAI sections of the publication. A sample inspection layout is shown here.

The outgoing commander needs to begin preparing for his change-of-command inventory months before the date set for it. The first step is a 100-percent inventory of installation and organizational property to the above standard three or four months before the change-of-command date. This 100-percent inventory should include an update of all hand receipts and the generation of any necessary statements of charges or reports of survey.

Missing Class II and Class IX components are placed on order to correct end item component deficiencies. The shortage annex is then updated with all of the new losses and items placed on order with a valid document number. For any equipment that is not present, there should be a valid turn-in or maintenance request document. The commander should update the hand receipts for any equipment that has been signed out to another unit. Administrative adjustment reports should also be initiated in case the serial numbers on some items (other than sensitive items) do not match.

After the inventory and up to 30 days before the change-of-command date, the outgoing commander ensures that parts are on order and statements of charges and reports of survey are settled, tracks the status of any adjustment reports, and meets with the new commander to discuss the upcoming change-of-command inventory.

The company XO should publish a memorandum of instruction (MOI) 45 to 60 days before the change of command. This MOI should include the dates of the pre-inspection, inspection, and reinspection of each commodity area and hand receipt in the company. The dates for these three inspections should be four or five days apart to allow time to correct



Sample Inspection Layout

deficiencies. The memorandum should also include the installation property inventory date, the property book freeze date—usually the starting date of the inventory—and the date on which the new commander will sign the property book.

The MOI depicts in great detail the incoming commander's standard for the inspection. It also states what each commodity area and hand receipt holder is responsible for by LIN, NSN, noun, and quantity. Using the latest company property book listing, the XO should ensure that all installation and organizational property has been listed to be inventoried. He should then list all the key dates in a 30-day calendar format so the new commander, the outgoing commander, each hand receipt holder, and the supply sergeant can easily see the scheduled inventory activities. Finally, to clarify the standards of the inspection, the XO should conduct a sample layout to standard for all hand receipt holders.

Thirty days before the change of command, a notice of the upcoming change-of-command inventory needs to be placed in the post bulletin with a statement requesting that all hand receipt holders clear their hand receipts. Also, at the 30-day mark, the new commander and the supply sergeant go to the property book office, receive the required division or installation property accountability briefing, along with an updated copy of the company property book listing, and then have the PBO freeze the company property book.

During the 30-day inventory period, the XO ensures that the inventory schedule is either followed or modified as necessary, and that the status of missing components is recorded. The new company commander conducts his inventory with the company supply sergeant according to the schedule, updates hand receipts, and records any deficiencies. Hand receipt holders display their equipment to standard for the inventory according to the schedule and update their sub-receipts. The supply sergeant updates primary hand receipts, records deficiencies, and initiates statements of charges and reports of survey.

At the end of the inventory, the supply sergeant compares his list of items for a statement of charges or a report of survey to the list of deficiencies the new commander has recorded. These two lists should match exactly. The supply sergeant then takes the lists of items from the statements of charges and reports of survey and adds them to the company shortage annex with the battalion S-4. The XO is then responsible for ensuring that all the deficiencies the new company commander has noted are corrected during his command.

The keys to conducting a change-of-command inventory are preparation, organization, a systematic approach, and the identification of deficiencies. The new commander must set his own standards for property accountability early and make sure the hand receipt holders follow his guidance and procedures. The outgoing company commander must ensure that he has taken all the necessary steps to identify and correct any potential property problems before the change-of-command inventory.

Periodic Inventories. Four primary periodic property inventories are conducted:

- The 10-percent cyclic organizational property inventory is generated monthly by the PBO. If this inventory is followed correctly, it will allow the company commander to view 120 percent of his property each year, satisfying the annual requirement for a 100-percent inventory. A recommended technique is to divide the installation property hand receipt into 12 sections and include one section as part of each monthly 10-percent inventory. The company commander, or the XO in his absence, is the only one who should conduct this 10-percent inventory. The company commander then signs the inventory and returns it to the PBO.
- The quarterly hand receipt update can be conducted by the supply sergeant, the executive officer, or a disinterested officer or senior NCO.
- The field recovery inventory should be conducted by the hand receipt holders and sub-receipt holders upon return from

field training events or training center rotations.

• The monthly 100-percent sensitive item inventory should be conducted by the company's lieutenants on a rotating basis. This inventory, generated by the PBO, includes the company weapons, night vision devices, and secure communications equipment. The results of the inventory are recorded on a computer printout of sensitive items, signed by the company commander, and returned to the PBO.

All of these inventories must be conducted to the standard the incoming company commander set during his change-of-command inventory.

Finally, even a well-conducted inventory is not worth doing unless the results are acted upon. Once an inventory is complete, hand receipts and shortage annexes must be updated, components ordered, and statements of charges or reports of survey initiated as necessary.

Statement of Charges/Report of Survey Process. Often, despite the most vigorous property accountability procedures, equipment is either lost, damaged, or destroyed. AR 735-5, *Procedures for Property Accountability*, states that a loss will be reported immediately to the unit's next higher commander as soon as it is discovered.

There are two common methods of claiming payment to the U.S. government for lost or damaged equipment:

• A statement of charges, the easiest path to reclaiming the cost of lost equipment, is used when the hand receipt holder admits liability or when the company command can easily prove it. This option is limiting, however, because some equipment is very expensive, and because the individual responsible for the loss must agree to sign the statement of charges.

• A report of survey is used when liability cannot easily be proved, or when the cost of the lost equipment prohibits the use of a statement of charges. Normally, a report of survey is mandatory if the loss exceeds three-fourths of the liable soldier's monthly base pay. When liability cannot be proved, the battalion commander, upon advice from the battalion S-4, appoints a report of survey officer to look for the proximate cause of the loss. If the proximate cause cannot be determined, then the report of survey is completed as a loss to the government. When liability can easily be proved, a short report of survey can be used.

The entire report of survey process can be extremely complex and confusing. The best references are AR 735-5, FM 10-14-3, *Surveying Officer's Guide*, and the advice and guidance of the battalion S-4 and the battalion XO, the resident experts within the battalion.

Finally, once the statement of charges or report of survey process is complete, copies of the results of the findings must be maintained—one copy with the battalion S-4, one with the supply sergeant, one with the hand receipt holder, and one in the soldier's supply record. The supply sergeant and hand receipt holder must ensure that the items listed on the statement of charges or report of survey are either added to a Form 3161 as a change document for the S-4 or added directly to the company shortage annex as soon as possible.

Unit Clearing Procedure. All units have a potential problem when a hand receipt holder leaves. Sections and entire units often go through turmoil because a new hand receipt holder is not immediately appointed. The following process will help prevent this problem:

One month before a hand receipt holder begins his post clearing process, he and the incoming hand receipt holder conduct a 100-percent inventory. The supply sergeant is presented with the shortage annex and an updated component hand receipt for the new receipt holder to sign. As the new receipt holder conducts his inventory, the hand receipt of each sub-receipt holder is also updated. At the end of this process, the new hand receipt holder signs the hand receipt from the supply sergeant, and the shortage annex is updated with the company commander's signature.

Losses from sub-receipt holders are reconciled using a statement of charges or a report of survey initiated by the hand receipt holder. Any losses by the primary hand receipt holder are reconciled in the same manner by the company supply sergeant. The same procedure is followed when sub-receipt holders leave, except that the primary hand receipt holder, instead of the company supply sergeant, supervises the entire procedure.

The remaining 29 days before the hand receipt holder begins clearing post are spent processing and completing statements of charges and reports of survey. All property accountability procedures should be complete before the hand receipt holder begins to clear the installation. This is especially important when a report of survey investigation is in progress, because the company commander can flag the records of the soldier involved, if necessary.

The final step is the company clearing form. A section of this form should allow a space governing cleared hand receipts. The new hand receipt holder should initial the form, stating that the property changeover process is complete. There must also be a section for each commodity area chief (NBC, arms room, communications) to initial, indicating that the soldier has cleared each section. The first sergeant, platoon sergeant, and squad leader must also monitor the process and be prepared to brief the company leaders. Finally, the company commander should sign the company clearing form only when all sections of the form have been initialed, especially the section on hand receipts.

Personnel. The company commander is the most important person in the company property accountability system, because his attitude, leadership, and emphasis will set the example and the standard for the unit.

The commander must make sure his subordinates are educated on the importance of property accountability; a system is in place to assign responsibility and account for all equipment; inventories are conducted to standard; hand receipts are updated regularly; the components-received process is ongoing; and a system is in place to clear soldiers' hand receipts as they leave the company. The company XO assists the commander in all these duties.

The company supply sergeant is the second most important individual in the accountability system; it is with him that the whole spirit of the process begins and ends. He must be

relentless in his pursuit of property accountability. He must be well-trusted and pro-active. The supply sergeant must conduct inventories regularly; order any publications that are needed; update and verify the shortage annex; ensure that incoming equipment components are properly accounted for; keep organized, accurate, and up-to-date records; use the statement of charges or report of survey when necessary; and carry out his many other duties. Finally, he must be a trainer, educating hand receipt holders and company leaders on the complexities and regulations of property accountability.

The company commodity area chiefs and the hand receipt holders are the final personnel in the property accountability chain. The hand receipt holders must ensure that regular inventories are conducted to standard; the necessary publications are on hand; component hand receipts are used; new components are recorded and accounted for; shortage annexes are updated regularly; sub-receipt holders clear their hand receipt before leaving; and lost equipment is accounted for using either a statement of charges or a report of survey. The hand receipt holders are also responsible for educating the end user, the soldier, on the procedures and policies of property accountability.

Equipment Maintenance. The company leaders must ensure that equipment maintenance and serviceability are part of property accountability inventories. A recommended technique is to have a layout of selected pieces of equipment at the end of the weekly maintenance day. This gives the platoon and company leaders an opportunity for a quick check of the serviceability and accountability of equipment. The field recovery inventory is another opportunity to confirm equipment serviceability and accountability.

Command Responsibility. As the property book holder for the company, the commander must vigorously and actively enforce property accountability. He must ensure that property accountability SOPs are established and followed; that hand receipt holders and soldiers are educated in supply accountability; that the parts ordering process is a continuing one; soldiers clear the company properly; that inventories are conducted to standard; that hand receipts are updated; and that equipment is maintained properly. He personally conducts his ten percent inventories of installation and organizational property.

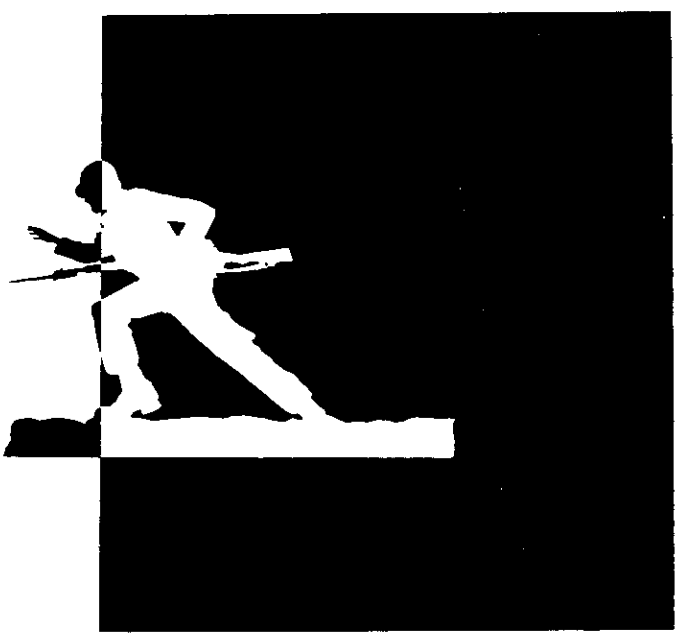
Company leaders, from team to platoon level, are responsible for supporting and carrying out all of the company commander's property accountability procedures.

Each of these pillars of company property accountability is free-standing, but together they form a solid, mutually supporting system that ensures company property accountability.

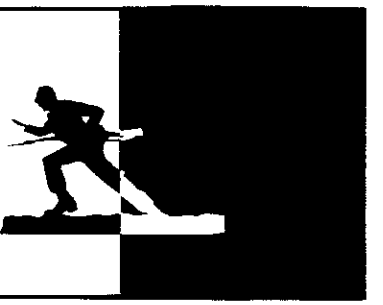
The ultimate goal of all property accountability procedures is to make sure the combat soldier gets the equipment he needs to support and win the battle. When everyone involved strives to strengthen each of the pillars, the company is sure to reach that goal and be ready to fight and win the first time, every time.

Lieutenant Chadwick W. Storlie is assigned to the 2d Battalion, 327th Infantry, 101st Airborne Division (Air Assault), where he has served as a rifle company executive officer. He previously served in the 2d Infantry Division in Korea as a mortar platoon leader and an assistant brigade S-1. He is a 1989 ROTC graduate of Northwestern University.

Captain Michael J. Lentz, now an observer controller at the Joint Readiness Training Center, previously commanded a rifle company in the 327th Infantry Regiment. He also served with the 1st Battalion, 508th Infantry, during Operation JUST CAUSE in Panama and with the 101st Airborne Division during Operation DESERT SHIELD and DESERT STORM. He is a 1983 ROTC graduate of Jacksonville (Alabama) State University.



TRAINING NOTES



Battle Staff Training

MAJOR WILLIAM E. HARNER

Unit performance at the combat training centers (CTCs) has clearly revealed the need for an effective battle staff training program. Battle-focused training programs for battalions and brigades must, therefore, include routine training for their staffs.

When I was assigned to the 2d Battalion, 327th Infantry, 101st Airborne Division (Air Assault), we used the "baseline" approach to training our battalion battle staff. We chose this approach because of the diversity of the staff members in both branch and experience level. The areas that received primary attention were operational terminology, intelligence preparation of the battlefield (IPB), the targeting process, and the tactical decisionmaking process (mission analysis, and the development of courses of action).

This training was conducted once a quarter or, when there were new members on the battle staff, before a major deployment. The participants included the primary members of the battle staff and their officer and NCO assistants—specifically, the S-1, S-2, S-3, S-4, fire support officer (FSO), and fire support NCO, engineer, and air defense platoon leaders, and all the officers and senior NCOs in the S-3 section. We also included our scout and mortar platoon leaders. In addition to learning staff planning considerations for the employment of their platoons, the scout platoon leader had an opportunity to work directly with the S-2, and the mortar platoon leader with the FSO. As the staff became more efficient with the battle staff fundamentals, more staff NCOs were brought into the training, which increased flexibility and added depth to the battle staff team.

Operational Terms and Graphics

Battle staff training should always begin with operational terms and graphics so that every staff member will understand and use them the same way. For example, commanders and their staffs often use the word *secure* when they mean *seize*; one of these words may appear in paragraph 2 of an operations order (OPORD) and the other in the commander's intent or concept in paragraph 3, referring to the same objective. The terms *on order* and *be prepared* routinely appear in OPORDs, and the staff must be able to differentiate them in terms of planning priorities. An *on order* mission assigned by higher headquarters is one that *will* be accomplished later and must be thoroughly planned; the *be prepared* mission is one that *may* be accomplished later and therefore has a lower planning priority. An *on order* mission is part of the paragraph 2 mission statement, while a *be prepared* mission may appear either in a sub-unit mission or in the OPORD's coordinating instructions.

Similarly, it is critical for infantrymen to understand the language of other branches in order to communicate the commander's intent for attachments, understand higher headquarters' OPORDs, and request support. For example, *destroy*, *neutralize*, and *suppress* are the terms used when communicating desired target effects to the FSO. Attack aviators use some of the same terminology, but with distinctly different meanings. Target effects guidance to an attack helicopter company commander, or his liaison officer, is in terms of *destroy*, *attrit*, and *disrupt*. To the FSO, *destroy* means he is expected to destroy 30 percent of the enemy target with a certain number of rounds within a specified period of time. To an aviator, destroy means he is to kill more than 70 percent of the enemy target and, depending on the nature of the objective, this may take an indefinite amount of time and resources and may put the aircraft at greater risk to antiaircraft fire. *(See also "The Language of Fire Support," by Lieutenant Colonel Robert D. Sander, INFANTRY, March–April 1990, pages 21–24.)*

The battle staff must also know military graphics so they can correctly complete course-of-action sketches, operations overlays, and templates. Our staff

training reviewed maneuver, fire support, and combat service support symbols and graphics. All the symbols for assigned and attached units were discussed and practiced.

Frequently overlooked and misunderstood, for example, are the four key engineer symbols that describe the maneuver commander's intent for his obstacle plan: *disrupt*, *turn*, *fix*, and *block* (Figure 1). The battle staff must know what these words mean, and the engineer platoon leader must explain the time, personnel, and materials required to establish each type of obstacle. *(See also "Obstacle Integration: A Matter of Intent," by Captain Bryan G. Watson, INFANTRY, May-June 1990, pages 42-46.)*

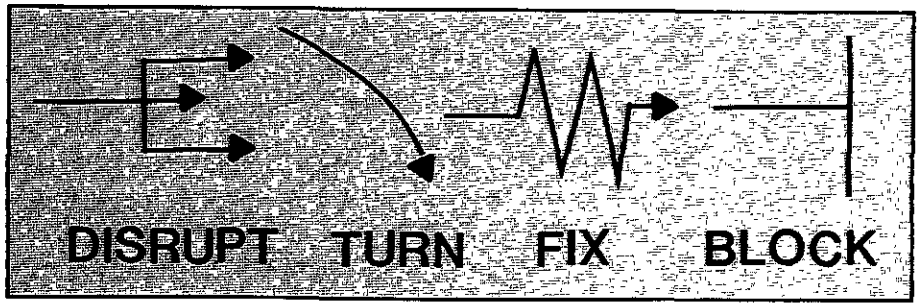


Figure 1. Four key engineer symbols.

Intelligence Preparation of the Battlefield

A few years ago, someone suggested that the intelligence preparation of the battlefield should be called the *staff* preparation of the battlefield, and I agree. The term IPB creates a false idea about who is responsible for the development of intelligence products. The IPB is not just an S-2 product. In its development, who better understands the effects of inclement weather on terrain and on both friendly and enemy courses of action than the engineer platoon leader? And who better understands the enemy fixed-wing and rotary aircraft avenues of approach into an area of operation than the air defense platoon leader? These two platoon leaders are often the most junior members of the battle staff—probably fresh out of an officer basic course—but they arrive at the tactical operations center (TOC) full of knowledge and already trained to serve as integral members of the battle staff. Still, if they are to make the most of their talents, they must also be cross-trained in the tasks of the other members of the battle staff. The FSO also plays an important role in the IPB. He is the expert in enemy artillery systems and capabilities, and he develops the high value target lists during the IPB.

The battle staff must understand, too, that the IPB is a continuing process (as shown in Figure 2), not a search for a final product. The IPB focuses staff attention by conducting a battlefield area evaluation (BAE). A BAE assesses the area of operation (AO) and area of interest (AI) and forms the basis for the analysis of the terrain, weather, and threat forces.

The battle staff learns terrain and weather analysis by practicing the preparation of the modified combined obstacles overlay, which contains GO, SLOW-GO, and NO-GO terrain, the AO, enemy avenues of approach, and mobility corridors. Frequently overlooked at this stage of the IPB is the line-of-sight analysis. The signal officer explains the effect of terrain and distance on frequency modulation (FM) ranging. All members of the staff must have a thorough appreciation of the effects of terrain on military operations, especially on emplacing weapon systems and designing battalion engagement areas.

Most of the intelligence training time is devoted to the fundamentals of the construction of IPB templates, the selection of priority intelligence requirements (PIRs), and collection planning.

Everyone on the battle staff learns how to construct doctrinal, situational, and event templates. These templates should at least portray the enemy's most prob-

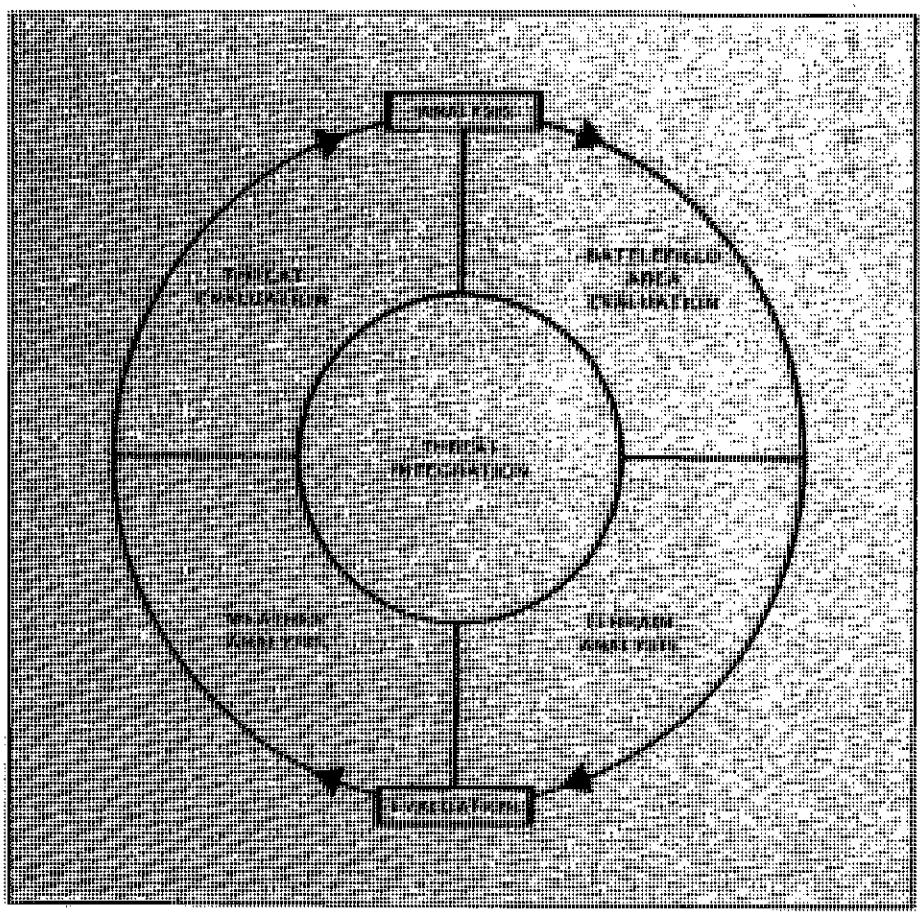
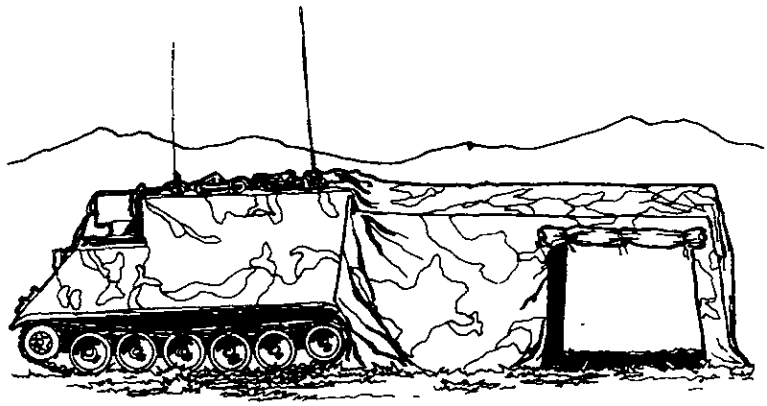


Figure 2. The continuing IPB process.

able course of action (COA), and the staff must be prepared to discuss the enemy's most dangerous course of action. The staff reviews the way the PIR is developed to fill in information gaps and confirm or deny the templates, and then reviews the basics of collection planning to demonstrate the interrelationship between the PIR and the templates. The most difficult task for a new member is learning how to develop a decision support template. Although this template is the most important IPB product, it is the one least likely to be produced during rotations at the CTCs.



The Targeting Process

To make the most of the resources at the fingertips of the brigade and battalion FSOs, all members of the battle staff should understand the targeting process. Artillerymen think in terms of the three *Ds—decide*, *detect*, and *deliver*.

During the *decide* phase, the FSO participates in the IPB and develops three products—the attack guidance matrix (AGM), target selection standards (TSS), and the high payoff target list (HPTL). The brigade FSO develops the AGM and TSS, and they are seldom modified at battalion level. Each FSO prepares the HPTL and recommends it to his maneuver commander for approval. The targets on the HPTL should be kept to a minimum, usually only four or five.

Central to the *detect* phase is the artillery battalion's AN/TPQ36 and its forward observers. Since the AN/TPQ36 is a high-payoff target for the enemy, plans must be made for its protection. The brigade should allow the unit that is the mission's main effort to identify critical fire zones for the AN/TPQ36.

The *deliver* phase is simply the weapon system that engages the target. This delivery system can be close air support, artillery, the battalion mortars, or nonlethal fire systems.

The Tactical Decisionmaking Process

Once the battle staff has a firm grasp of the basics of operational terms and graphics, the IPB, and the targeting process, staff training is focused on the tactical decisionmaking process—the "bread and butter" of a well-functioning staff. Mission analysis and COA development receive primary attention in this training; ST 100-9, *Techniques and Procedures for Tactical Decisionmaking*, discusses some of the components of mission analysis, such as the IPB. These components are brought together with the analysis of the mission and intent of higher headquarters.

In our battalion, we routinely requested two copies of the brigade OPORD when it was first issued. One copy remained with the commander and the S-3 while the brigade staff verbally issued the order. The battalion liaison officer immediately sent the second copy back to the executive officer and the battle staff waiting in the battalion TOC. The staff was taught to dissect the brigade order; identify specified, implied, and essential tasks; and write a restated mission statement. The restated mission statement clearly identified the task and purpose for the battalion.

Staff training in the development of courses of action consists of three parts—the COA sketch, the COA narrative, and the discussion of the components of the commander's intent. Once the staff members master operational graphics, they usually find constructing the COA sketch simple. The sketch includes boundaries, control measures (phase lines, objectives, main and supporting attacks, and fire control measures), decision graphics for the allocation of forces, and key terrain features.

As standing operating procedure in our battalion, the S-2 drew a map of the AO on butcher paper, from which two other copies were traced. Three teams (three or four men each) used these three maps to develop distinctly different COAs. An advanced course graduate was usually chosen to lead each team. When the battle staff was short on IOAC graduates, the headquarters company commander was brought in to lead a team; since he had been on the battle staff before, he was familiar with the drills and quickly fit in with the staff.

The COA narrative has three major components—*purpose statement*, *battlefield framework*, and *risk*:

- A sample purpose statement is "250230 Feb 93, TF 2-327 attacks with three rifle companies to destroy an enemy regimental command post."
- The battlefield framework includes *close*, *deep*, *rear*, *reserve*, and *security*. The *close* battle includes the main effort or main attack and its size, the supporting attack and its size, the scheme of maneuver, the decisive point, and the defeat mechanism. *Deep* operations are limited for a battalion and usually address the scouts' reconnaissance and surveillance operations. Attack helicopters supporting the operation are a part of deep operations when escorting the scouts into the AO. The *rear* operations section addresses such special activities as convoy security operations for strike operations or mobility, countermobility, or survivability operations of the engineers. *Reserve* forces are identified by size and location of unit, with on-order missions specified. The *security* force, usually the scouts, is given a location and mission—a screen, for example.
- The last point addressed in the COA narrative is the point at which the com-

mander is prepared to accept risk in regard to the mission or the unit. For example, the COA may not have a reserve.

If this format is followed in preparing the COA narrative, the narrative can easily be converted to a paragraph 3a of the OPORD.

The commander communicates his vision of the operation through his statement of intent. Each unit commander and his battle staff must clearly understand the intent of the commander two levels up. By our battalion SOP, the division and brigade missions and the commanders' intent statements were posted throughout the tactical decisionmaking process and then briefed when the OPORD was issued. The staff was taught to recognize the four parts of a commander's intent—purpose, method, risk, and end-state—in regard to the disposition of friendly and enemy forces and terrain. The battalion commander's intent was then communicated two levels down the chain of command through the company commanders by the OPORD and during the battalion reduced-force rehearsal, at which the platoon leaders were present.

This baseline battle-focused approach works in training Active Army battalion and brigade battle staffs, and it should also work for Reserve component (RC) units. Our battalion exported this training package to a battalion of our RC partnership unit one summer, where it was used as opportunity training during the battalion's annual training period. They found that it fit in perfectly with the BOLD SHIFT philosophy, and that it gave the staff battle-focused training objectives while their squads conducted situational training exercises.

Clearly, setting aside time in garrison for this battle staff training is difficult, but it can be done if it is given high priority. A baseline approach that includes a foundation in the language of our profession, the IPB, the targeting process, and the tactical decisionmaking process will pay big dividends, both in training and on the battlefield.

Major William E. Harner served as S-3 of 2d Battalion, 327th Infantry, 101st Airborne Division (Air Assault), as the division's secretary of the general staff, and is now a brigade S-3. He is a 1978 graduate of the United States Military Academy and holds a master's degree from the University of South Carolina.

The Use of History
In Professional Development

CAPTAIN STEVEN R. VAN KIRK

The competence of junior officers and noncommissioned officers is a critical factor in the success of an infantry unit in combat. Well-trained, seasoned leaders have often made the difference between defeat and victory.

During the past 20 years, most U.S. Army infantry units have had a cadre of combat veterans who brought to training their practical knowledge and experience. Most of these veterans gained their combat experience in the jungles of Southeast Asia and have now either retired or advanced to positions in which they have limited contact with small-unit leaders. The U.S. combat actions since the Vietnam War have also provided valuable experience to many officers and NCOs, of course, but these actions generally involved only a small percentage of the entire Army and were of limited intensity and duration.

Confronted by this lack of extensive combat experience in their units, small-unit commanders now face a difficult question: How can a commander improve the seasoning and experience of his subordinates, short of actually engaging in combat operations?

The obvious answer to this question is to plan and execute realistic training. But constraints on time and resources frequently limit the duration and the scope of field training exercises. Many units use simulations and map exercises to develop their leaders. Simulations offer tremendous potential for training officers but are not always readily available to units.

Often officer professional development (OPD) or NCO professional development (NCOPD) classes are used as training tools. A solid, well-planned program is one of the easiest and most economical means of improving the competence of these leaders, and integrating military history into an OPD or NCOPD program is essential to this process.

The great battle captains of the United States Army in the past clearly understood the importance of studying military history. Army Chief of Staff General Douglas MacArthur, for example, once said, "More than most professions the military is forced to depend upon intelli-

gent interpretation of the past for signposts charting the future." In short, officers who are serious about their profession have to study military history and attempt to use its lessons to find solutions to today's problems. Integrating historical examples with current doctrine will either reveal why a doctrinal solution is sound or lead to the development of a better solution.

Many unit commanders demand that these classes focus on warfighting skills, and unit mission essential task lists (METLs) provide a good starting point in determining the skills and tasks that should be emphasized in the program. One METL task should provide ample material for a solid OPD or NCOPD class. Establishing a regular schedule of classes, each focusing on a single METL task, will give the program structure and purpose. In the end, this effort will pay bigger dividends than one that simply jumps from one subject to another.

Once a METL-oriented program is adopted, the next task is to prepare individual classes, and this is a good job for the company's lieutenants. They have to research the assigned topic, prepare and rehearse their presentations, and field a series of questions from their peers. In short, each of them must become a subject matter expert. In the process, they not only learn about the assigned topic but also refine their briefing skills. The alternative to this technique is to have the commander prepare and present the class, which gives him a chance to train and develop his subordinates personally. Although both approaches offer advantages and disadvantages, both can be effective.

The Army has prepared numerous manuals that describe the conduct of doctrinally specific operations. Regrettably, though, few junior leaders have read and studied these manuals. For this reason, discussing the way "the book" says a unit should conduct a METL task is a good starting point for a session. The instructor should also link to that METL task the applicable portions of his unit's tactical standing operating procedure (SOP). If the unit does not have a well-established tactical SOP, the resulting discussion will highlight the points the SOP should address.

Many young leaders, after they look at the prescribed way of conducting an operation, often think they have a better way. Sometimes they are right. In many cases, though, their lack of experience may lead them to overlook a key point that may have shaped the development of "the school solution." Fortunately, the numerous real-life combat experiences found in historical accounts of small-unit actions can either validate or refute the doctrinal solution that has been laid out in the first part of a class. It can also increase the junior infantry leaders' level of experience.

Obtaining applicable historical examples to use in analyzing the doctrinal solution does require some effort, but many resources and agencies are available to make this effort easier. For example, the Combat Studies Institute at Fort Leavenworth, Kansas, has published the *Leavenworth Papers*. These detailed studies cover a variety of topics ranging from

Soviet operations in World War II to the U.S. intervention in the Dominican Republic in 1965; they often include useful maps.

The Infantry School's interwar collection of combat experiences from World War I, *Infantry in Battle*, was produced while General George C. Marshall was Chief of Infantry, with the intention of giving "the peace-trained officer something of the viewpoint of the veteran." This thought-provoking work covers everything from the technical innovations developed during the Great War to the role of leadership in battle. Originally published by the Infantry Journal Press, this book has been reprinted by the Marine Corps Association (R.R. Bowker, 1982).

During World War II, S.L.A. Marshall developed a technique of interviewing soldiers immediately after a combat action and using these after-action reviews to piece together detailed descriptions of the small-unit action. He published numerous works on actions ranging from World War II through the Vietnam War. Any one of his books could make a major contribution to a unit professional development program.

Historical descriptions of specialized operations such as city fighting are also available. William Craig masterfully describes the Battle of Stalingrad in *Enemy at the Gates: The Battle for Stalingrad* (Readers' Digest Press, 1973). Tony Le Tissier outlines the final European battle of World War II in *The Battle of Berlin 1945* (St. Martin's Press, 1988). Both of these books offer insights into urban operations, something frequently mentioned but rarely emphasized in units.

Several books focus on leadership at the small-unit level. James R. McDonough's *Platoon Leader* (Presidio Press, 1985) relates his experiences as a platoon leader in Vietnam in 1970-1971. In his World War II classic *Company Commander* (Ballantine Books, 1947), Charles B. MacDonald describes the challenges his company faced as it fought its way across Europe from September 1944 until the end of the war in Europe. Erwin Rommel's *Attacks* (Athena Press, 1979) recounts the future Desert Fox's daring World War I exploits as a company and detachment commander. S.L.A. Marshall's *The River and The Gauntlet: Defeat of the Eighth Army by Chinese Communists forces, November 1950, in the Battle of the Chongson River, Korea* (William Morrow & Company, 1953) describes the intervention of the Chinese communist forces in Korea in November 1950. Although Marshall focuses much of his attention at small-unit level, this work also provides an interesting look at division-sized operations—in this case, a series of bad decisions by the senior leaders of the 2d Infantry Division resulting in one-day losses that rendered the division combat ineffective.

Numerous U.S. units, both at home and overseas, might take advantage of the historic battlefields nearby. Many of the actions fought at these sites are well-documented in historical literature. As an example, numerous engagements from the Korean War are described in such books as T.R. Fehrenbach's *This Kind of War: A Study in Unpreparedness* (Macmillan, 1963); and Clay Blair's *The Forgotten War: America in Korea* (Times Books, 1987). Units stationed in Korea can easily integrate these readings into their professional development plans, with the long-range goal of using several classes to lay the groundwork for a staff ride.

In addition, many infantry units have long and colorful regimental histories. The 505th Parachute Infantry Regiment, for example, can easily draw upon the many accounts of its actions during World War II. Some of the more accessible sources are William B. Breuer's *Drop Zone Sicily: Allied Airborne Attack, July 1943* (Presidio Press, 1983); S.L.A. Marshall's *Night Drop: The American Airborne Invasion of Normandy* (Little Brown, 1962); and Gerard Devlin's *Paratrooper: The Saga of U.S. Army and Marine Parachute and Glider Combat Troops During World War II* (St. Martin's Press, 1979).

The reunions that wartime veterans' organizations hold regularly are another possible source of information on regimental combat histories. The men who fought in previous conflicts are often able to provide interesting and informative supplements to the written regimental histories.

Clearly, commanders can integrate historical examples into their professional development programs in many ways. A company level officer professional development session can rely upon a simple discussion of the applicability of the lessons learned from history. A model or sand table can make it easier for them to understand what happened in the historical example. One book that stresses the need to compare "now" with "then" in terms of similarities and differences is *Thinking in Time: The Uses of History for Decision-makers*, by Richard E. Neustadt and Ernest R. May (Collier Macmillan, 1986). The use of this framework will help prevent young officers from drawing faulty conclusions from the past and then applying them to the present.

The final step in this OPD or NCOPD process is to answer a question: Is the book solution for this METL task the most effective way to accomplish the mission? If the answer is *yes*, then the unit SOP and Army doctrine are based upon solid premises. If the answer is *no*, the historical lessons derived from the session should help formulate a better solution to the tactical problem.

Efforts to link history with the present are critical to our leader development. The study of military history not only improves the level of experience in our units, but also injects into our junior leaders a sense of history—a key factor in sustaining professionalism and technical competence during the years between wars.

Since resources and funds will probably be increasingly scarce in the years ahead, the need to study the lessons of the past and apply them to the present will become even more important. Integrating historical lessons into professional development classes is a good first step in promoting this process.

Captain Steven R. Van Kirk has served as a platoon leader, company commander, and company executive officer in the 1st Battalion 502d Infantry and as an aide-de-camp in the 10th Mountain Division. He is now an assistant professor of history at the United States Military Academy. He is a 1983 graduate of the Academy and holds a master's degree from Yale University.

Drop Zone Support Team Training

CAPTAIN PAUL S. WARREN

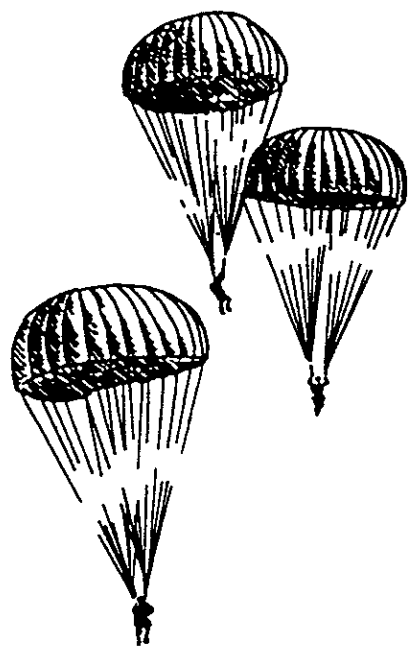
Today's missions continue to require that combat units be proficient in conducting sustainment operations by air. As commanders rely more heavily on the accurate delivery of supplies, they have an even greater need for personnel who are trained in establishing drop zones to receive these supplies.

Most commanders assume that the control of the drop zone for aerial resupply during wartime is the responsibility of Air Force combat control teams (CCTs). As doctrine changes, however, and as units develop more complex mission profiles, the requirements for airdrop support often exceed the capabilities of the CCTs. And even when a team is available, the tactical situation may not allow for its insertion before an airdrop.

To cope with this problem, in 1987 the U.S. Army, Air Force, and Marine Corps agreed to give Army and Marine Corps personnel the primary responsibility for establishing and operating drop zones. As a result of this agreement, Air Force CCTs now focus on force projection, the airdrop of large numbers of troops and equipment, and sustainment missions at brigade level and above, while certified Army and Marine Corps personnel provide airdrop support to forward units at battalion level and below.

To meet the requirements for maintaining the ability to perform these missions, the Army and Marine Corps established the concept of a drop zone support team (DZST). A team consists of two soldiers—a leader and an assistant leader—who provide a direct link between the ground commander and the supporting unit. Their job is to select, establish, and control drop zones for both planned and emergency airdrop operations.

Training the team is the responsibility of the immediate commander. Because of the required certification, however, this training can be conducted only by DZST-qualified personnel. Support for this training is available through the United States Army Airborne School (1st Battalion, 507th Infantry) at Fort Benning, Georgia. At the request of unit commanders, the school's Pathfinder Training Branch provides a mobile training team (MTT) that can train and certify DZST candidates on-site. Qualified MTT instructors train and certify students on all facets of operating drop zones for receiving both bundle and container delivery system (CDS) missions.



This training, conducted over a five-day period, offers comprehensive instruction in establishing and operating computed air release point (CARP) and ground marker release system (GMRS) drop zones. The students normally spend the first two days in classroom instruction on the DZST leaders' duties and responsibilities, regulations governing the establishment of drop zones, and assessing the suitability of a tentative site for future operations. Before leaving for the field training phase, the students also receive instruction on using the required equipment and on determining wind speed and direction and safe operating conditions.

The two-day field training phase allows students to put into practice what they have learned in the classroom. DZST instructors supervise as the students establish and operate a live drop zone using Air Force C-130 aircraft and various bundle and CDS configurations. During this phase, the students get practical hands-on experience in setting up CARP and GMRS drop zones for both day and night missions.

On the final day of training, students are tested on what they have learned. Once a student has passed the testing phase, he is fully qualified to run a resupply drop zone for a drop formation of up to three C-130s or any number of helicopters.

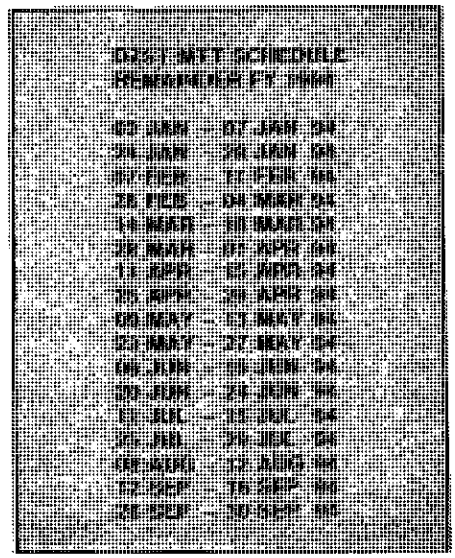
To maintain their DZST skills, these soldiers must actively participate in an airdrop operation at least every six months, either as DZST leaders or assistant leaders. Leaders who lose their currency must attend a refresher course given by a currently qualified team member. User units conduct these refresher courses, or arrange the training through the Pathfinder Branch at Fort Benning.

Actions at the Joint Readiness Train-

ing Center and the National Training Center have shown that the fast, efficient delivery of critical supplies by air has a direct effect on a unit's ability to continue the fight. Training soldiers to serve on drop-zone support teams is a cost-effective method of improving sustainment capabilities during peacetime and war; a drop zone support team's level of training can determine whether air-dropped supplies arrive on target or fall into enemy hands.

DZST training is open to any unit, regardless of its mission requirements. Commanders who take advantage of it will improve their units' ability to resupply themselves by air when all attempts by ground have failed or are otherwise impractical.

The DZST Mobile Training Team mission schedule for the remainder of Fiscal Year 1994 is shown here. A commander who is interested in this training should contact his division G-3 Air to request a class date as soon as possible.



Class dates are reserved on a first-come, first-served basis. All funding and support for the DZST MTT is the responsibility of the using unit, but Pathfinder Branch will provide qualified instructors, class hand-outs, and the applicable publications.

The point of contact for information and coordination is 1st Battalion, 507th Infantry, ATTN: Pathfinder Branch (DZST), Fort Benning, GA 31905; telephone (706) 545-3218/1111 or DSN 835-3218/1111.

Captain Paul S. Warren served as chief of the Advanced Airborne Operations Detachment, 1st Battalion, 507th Infantry and now commands a company in the battalion. He previously served in the 82d Airborne Division and led a rifle company in the 25th Infantry Division. He is a 1987 ROTC graduate of Texas Christian University.

Airborne Operations

Recovery From Tree Landings

CAPTAIN DAVID A. McBRIDE

Most soldiers assigned to airborne units for any length of time have seen a paratrooper miss the drop zone and land in a wooded area. The jumper involved either passes through the trees and hits the ground or becomes entangled. A jumper who is hanging in a tree should always try to free himself if he can do so without undue risk of injury. Sometimes he can step out of the harness or climb down, using the tree's trunk and branches. But if he is higher in the tree, can't reach the trunk or a sturdy branch, or is injured, he may have to be rescued.

Airborne units are required to include emergency landings in pre-jump training. SH 57-1, *The Jumpmaster Checklist*, describes the steps a jumper should take when he realizes he is about to land in the trees. The checklist says that "after landing in a tree, a parachutist may have to activate the reserve chute and climb down the suspension lines on the outside of the canopy." Field Manual (FM) 57-220, *Basic Parachuting Techniques and Training*, describes these steps in greater detail and with the following warning: "Make sure the reserve reaches the ground or comes close to it before continuing with the following actions."

Unfortunately, though, neither manual covers techniques for conducting a rescue when the jumper can't or won't free himself (occasionally, a jumper may refuse to try for fear that any movement on his part will cause the parachute canopy to release itself and cause him to crash to the ground). Equally lacking is information on training and equipping the drop zone support team. As a result, most tree rescues are based on trial and error and depend to a large extent on the experience of the recovery detail and the jumper.

In an attempt to fill this gap, I would like to share a good working technique for getting a jumper out of a tree. This technique grew out of my experience in a variety of airborne assignments (the 75th Ranger Regiment, the Ranger Training Brigade, a long-range surveillance unit, and the Joint Readiness Training Center); it does not reflect the official policy

of any agency or command. The only equipment required is one 120-foot climbing rope, two snaplinks, and some climbing spikes.

The technique includes the following steps, as illustrated in the accompanying sketches:

Figure 1:

- The jumper activates his reserve, making sure it hangs to its maximum length. He does not disconnect the chest strap or jettison equipment that he may still have with him.
- He attracts the attention of the recovery detail or fellow jumpers equipped with climbing ropes and snaplinks.
- The recovery detail designates one climber (equipped with climbing spikes and one end of the climbing rope that has an end-of-the-line bowline with two snaplinks) to climb until he can attach one end of the snaplinks and the rope to the drogue chute of the jumper's reserve. If climbing spikes are not available, the climber may climb or be hoisted to a point from which he can reach the drogue chute. If this does not work, the

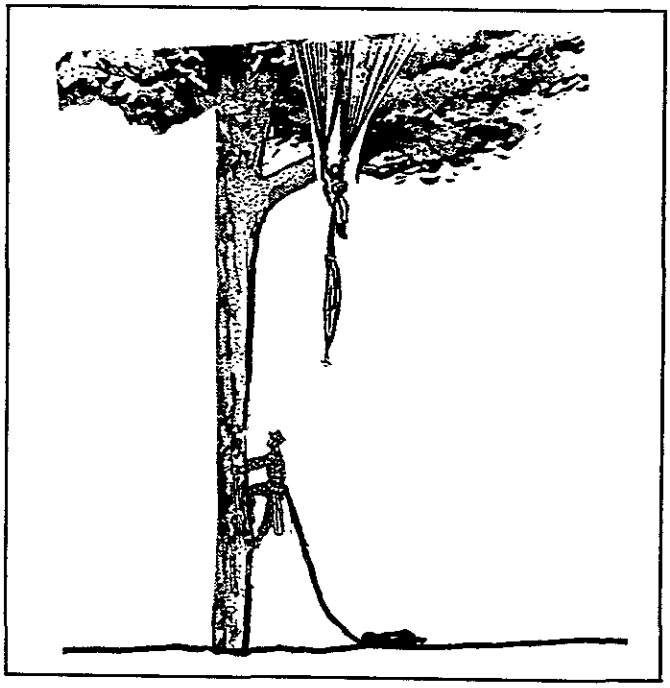


Figure 1

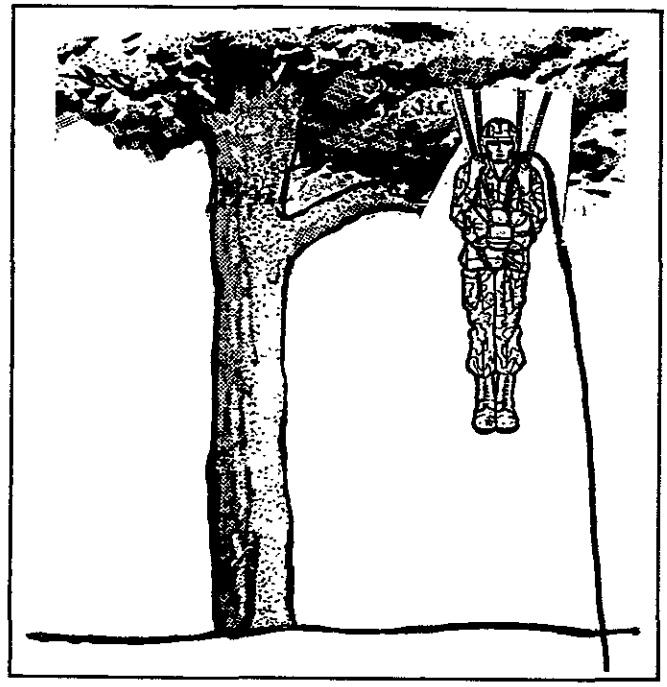


Figure 2

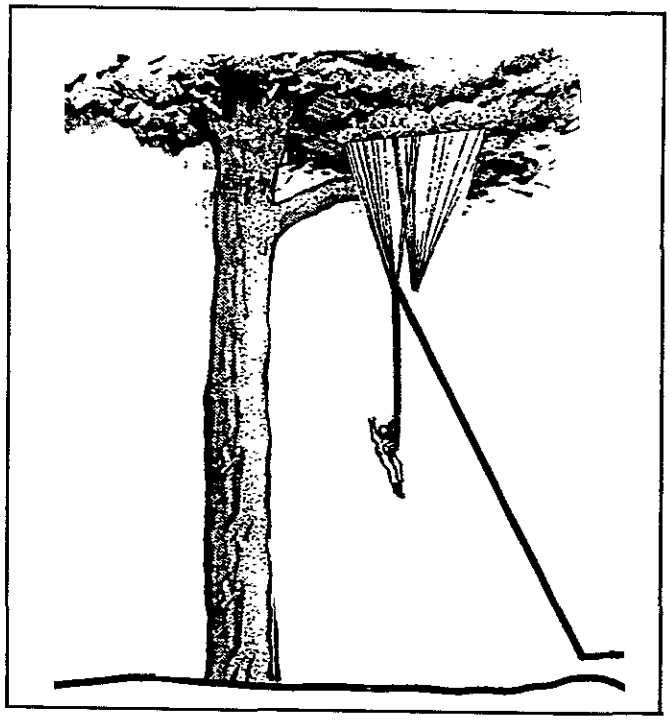


Figure 3

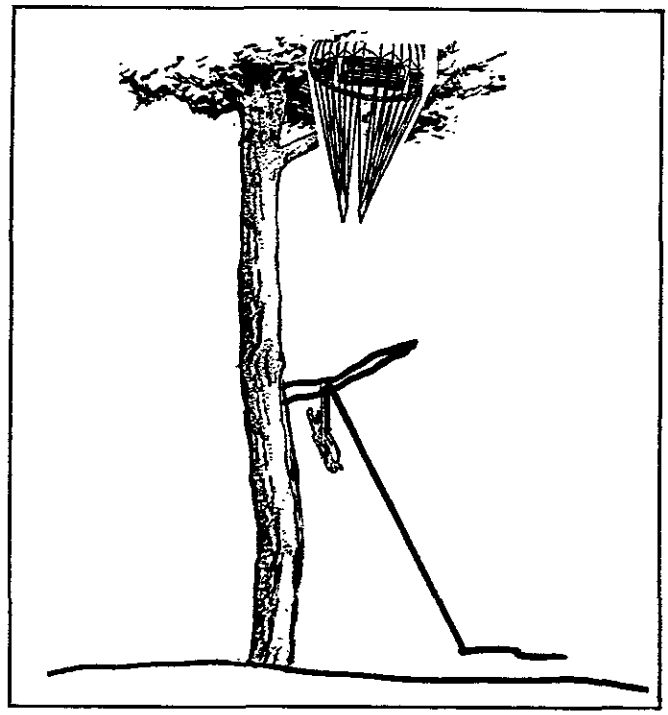


Figure 4

end of the rope should be weighted and tossed up to the jumper.

• The jumper retrieves the reserve rope and snaplinks from the drogue chute.

Figure 2:

• If the jumper is not within reach of any branches or the trunk of the tree, the climber uses the rope to pull the jumper closer so he can reach a branch or the trunk for support.

• The jumper connects the snaplink to one of the riser assemblies, routes the second snaplink through the first, and connects it to one of the D-rings of the main lift web. (Or he may choose to route the climbing rope over a sturdy branch instead of through the riser assembly.)

• The jumper disconnects the waist band and removes the reserve parachute. He balls up the reserve and tosses it to the ground, making sure it does not snag on lower branches and get in his way as he descends.

• If his rucksack and weapon have not been jettisoned, the jumper may elect to use the climbing rope to lower them to the ground. This is particularly important if the jumper has sensitive or mission-essential equipment with him, or if the height is such that a fall may destroy the frame of his rucksack.

Figure 3:

• The recovery detail secures the running end of the rope and prepares to belay the jumper. The detail must consist of enough soldiers to control the jumper's body weight.

• The jumper tries to take his weight off the parachute risers by grabbing or stepping on limbs or by wrapping his legs around the tree trunk.

• The jumper releases both cable-loop canopy release assemblies, one at a time. His weight is now supported by the belay team or by tree branches.

• The jumper climbs down the tree, using any available branches or the tree trunk. The belay team provides slack as needed. Or, if necessary, the belay team lowers the jumper to the ground.

Figure 4:

• If the jumper is higher than 60 feet (one-half of the climbing rope), the recovery detail may have to connect two ropes together. If the tree has a sturdy branch at a lower level, about mid-way down, this may not be necessary; the jumper can stop on this branch and reroute the climbing rope down from the riser assembly and over the branch before trying to descend the rest of the way.

The following are some additional comments on the technique:

In Figure 1, if the jumper realizes he can't reach the ground safely using the reserve, then he must release the reserve and lower it to the ground so it won't get tangled with other branches or the rope.

In Figures 1 and 4, the climber should attempt to reach the jumper by using the 120-foot rope to secure him and pull him to the tree trunk or a nearby branch. If the climber cannot do either of these things, he climbs to the point of attachment or above the jumper; secures the rope around a branch that will support the jumper using the rope with an end-of-line bowline with snaplink, and then lowers the jumper. The jumper secures it to the left or right D-ring. The belay team takes up the slack in the rope, the jumper activates the riser assembly, and the belay team then lowers him to the ground safely.

In Figure 3, the recovery detail throws the 120-foot rope to the jumper, or a climber delivers it. The jumper takes one of the snaplinks and attaches it to the riser assembly or the male fitting of the riser assembly. The jumper routes the rope through the snaplink attached to the riser to prevent nylon-to-nylon contact between rope and riser assembly. He then releases both of the cable-loop canopy release assemblies, and the belay team lowers him to the ground safely.

This recovery technique can be conducted tactically and in limited visibility. If the expected drop zone is small or surrounded by tall trees, instruction on this technique should be part of the pre-jump training. Since many actual recoveries turn into fiascoes with white lights and loud commands, the tactical implications of this technique are obvious, especially if the jumping element is small or the loss of jumpers or secrecy will have an immediate effect on the tactical operation.

The most important consideration is to get the jumper out of the tree quickly, safely, and with as little damage as possible to his equipment.

Captain David H. McBride has served in a variety of airborne and Ranger assignments and is now S-3 of the 4th Ranger Training Battalion at Fort Benning. He is a 1982 graduate of the United States Military Academy.

Ambush and Patrol Techniques

COMMAND SERGEANT MAJOR DWIGHT E. ANDERSON

The Vietnam War has been described as a squad leader's war and, in my case, it was. I served more than six months of my one-year tour in 1969 as a squad leader in the 1st Marine Division. Many of the lessons we learned are still useful today.

A Marine rifle platoon at that time consisted of three 11-man rifle squads, a 9-man machinegun squad (two M60s), and a platoon headquarters made up of the platoon leader, platoon sergeant, ra-

dio telephone operator (RTO), and two Navy corpsmen as medics.

Normally, we operated as a platoon out of platoon patrol bases. The enemy we fought were mostly North Vietnamese Army (NVA) with a smattering of local Viet Cong (VC). They operated in small teams, massed only for a major attack, and then quickly dispersed again. We fought them in highland jungle terrain as well as in lowland rice paddies.

The squad tactics we used in patrols and ambushes were based on two assumptions—that we were always being watched and that, if we were being watched, we were probably being followed wherever we moved. These two assumptions are just as valid today for units operating in low-intensity conflicts at various places around the world—or just going up against the opposing force at the Joint Readiness Training Center (JRTC).

In Vietnam, most patrols consisted of a rifle squad and a machinegun team operating from the platoon patrol base. At night, the platoon sent out one squad-sized ambush and at least one fire-team-sized listening post. The squad that pulled the night ambush usually did a squad patrol in the morning; a second squad pulled the afternoon patrol, and the third secured the patrol base.

An average patrol in the lowlands was three to five kilometers long with three or four checkpoints, designated by the platoon leader. One purpose of the morning patrol was to select a site for the night ambush. (A squad rarely ambushed at a site it had not seen in daylight.) Either the platoon leader or the squad leader chose the site.

An average patrol took three to four hours, and we spent part of that time trying to fool the enemy we assumed was watching and following us. The technique we used to do this was something we called a "drop-back" ambush. On a signal from the squad leader, two or more men—previously designated and scattered throughout the squad—would drop to the ground and cover to the rear. The squad would continue moving a few hundred meters and set up security. The drop-back team would remain in place 10 to 15 minutes and then rejoin the rest of the squad. This tactic was repeated two

Natural obstacles can often restrict patrols' movement, as seen in this 1965 photo of a squad patrol in Vietnam, by members of the 173d Airborne Brigade.

or three times on a normal patrol, and it was very effective, accounting for a good percentage of our kills.

When the squad came to the designated night ambush site, it again set up security while the squad leader and the team leaders determined the best way to conduct the ambush. Then the squad continued moving until it was a safe distance from the ambush site. The squad leader then got on the radio (each squad had an RTO with an AN/PRC-25), called the company's 60mm mortar section, and adjusted a target reference point (TRP) with smoke on the ambush site. The squad then completed the patrol and moved back to the patrol base to rest up for the night ambush.

At dusk, the squad moved out toward its night ambush site. (Marines call it a stinger site.) Just short of the listening pause site—similar to an objective release point (ORP) but not occupied—we used the same drop-back tactic to cover our rear from anyone who might be following. The squad moved into the listening pause site, waited for the drop-back team to rejoin it, and then, under cover of darkness, moved the last few hundred meters to the ambush site.

I realize that Field Manual 7-8, *Infantry Rifle Platoon and Squad,* discusses only the "L" and the linear types of ambush formations, but we normally used a triangle formation. Both the L and the linear formations assume the enemy is coming only from a certain direction, and we learned never to assume anything about the NVA and the VC—except that they were all around us.

The two base positions of the triangle were oriented on the most likely enemy avenue of approach. The squad leader, the RTO, and the M60 gunner and assistant gunner were in the first position, and four riflemen were in the second. In the rear position were the M79 gunner with an illumination round loaded, a Navy corpsman, and two more riflemen. To cover the kill zone and the rear, each position put out at least one claymore, normally two.

Additionally, we placed M49 trip flares in the kill zone and on any avenue of approach to the rear. (We could emplace the trip flares in less than 45 seconds and retrieve them even faster.) Today, of course, we have fantastic little night observation devices, and I only wish we had had them in Vietnam instead of the primitive starlight scopes. But I still love the M49 trip flare; it doesn't sleep, and it doesn't use batteries.

At night the enemy tended to move in small teams of two to four men. If they were going to attack an objective, these teams dispersed during movement, assembled to hit an objective, then dispersed again and moved back up into the hills. We also suspected that the local VC were acting as escorts for the NVA to get them past known U.S. Marine elements. Since the purpose of the ambushes was to kill these VC as they tried to move around at night, we had to use stealth and subterfuge in getting into our ambush sites.

The ambushes, when executed, were quick nasty affairs—trip flares, claymores, small arms, grenades, and a quick search of the bodies—and we did not stick around for long afterward. We moved back to the last listening pause (ORP) as quickly as stealth allowed. Once there, we put the trip flares and claymores back out and stayed at 100 percent security. We knew the enemy probably had other small groups moving through the area and hoped that when they heard our weapons fire they would filter over to check on their buddies. When they did, the squad leader called the mortars and fired the TRP he had registered during the morning patrol.

The patrol bases we operated from were the source of another technique that we called a "stay-back" ambush. Experience had taught us that the VC wasted no time checking out places we had stayed for a few days. They were great scroungers and could use almost anything we might lose or throw away. To fool them, we left small, well-covered and concealed teams in the old patrol base. On one occasion, we boxed up all our C-Rations and stacked the cases while five Marines lay in wait, claymores ready. Within 45 minutes of the platoon's departure, a six-man NVA team carrying a mortar tube showed up. The first man came in, saw the C-Rations, and started calling for his buddies to share his good fortune. The rest I'm sure you can figure out.

When patrolling in the mountains, we found that the heavy vegetation restricted our movement to the trails. The NVA tried to evade us by simply getting off the trails, lying low, and allowing us to move through. Quite often, we had scout dogs, which the NVA hated—and for good reason: With the dogs around, they couldn't hide on the side of the trail. When we did not have scout dogs, we used a simple patrolling tactic:

We moved down the trail as a platoon, then stopped and put out an M60 to the front and another to the rear for security. Then every man cloverleafed both sides of the trail to his left and right. Then, with everyone back on the trail, we moved, halted, and repeated the process. Although this tactic was slow, it was effective for clearing an area of any enemy we might otherwise bypass in dense terrain.

I believe that other units in other situations will find these lessons and techniques just as relevant today as they were in Vietnam and just as relevant for Army infantrymen as for Marines. As our Army's missions take us to those remote areas where an elusive enemy must be found and engaged, the ambush and patrol techniques of 25 years ago can be as effective today as they were in that earlier war.

Command Sergeant Major Dwight E. Anderson served as a rifle squad leader, Company F, 2d Battalion, 5th Marine Regiment in Vietnam, as a TOW section sergeant in Germany, and as a rifle company and headquarters company first sergeant in the 4th Infantry Division. He is a graduate of the University of New York and is now assigned to the 3d Battalion, 21st Infantry, 25th Infantry Division, in Hawaii.

An Alternative Training Model
For Reserve Component Annual Training

MAJOR FRANK T. FRAGALE
CAPTAIN KEVIN M. WALKER

With the current emphasis on a smaller, more mobile force that can deploy rapidly, early-reinforcing reserve component (RC) combat units are receiving greater scrutiny.

For example, Operation BOLD SHIFT, which was implemented in pilot units during Training Year 1992, is designed to increase the individual soldier skills and collective skills of RC units through platoon level. Once these building blocks have been established and sustained, RC units will be able to deploy with only 30 to 60 days of collective post-mobilization training at higher echelons.

Many RC combat arms units that use the typical two-week annual training (AT) period find it difficult to sustain their proficiency in individual and collective tasks. These units usually achieve their peak training proficiency at the end of their AT periods and then begin a downward trend in combat skills until early spring when attention is again focused on preparing for the next AT period.

The timing of annual training periods also affects unit readiness. Because of competition for resources and training areas, the time between AT periods can range from nine months for some units to 16 months for others. Many RC combat arms soldiers are students or civil servants, and a significant number of unit leaders are self-employed. As a result, when AT periods overlap school years for high school or college students, or when they conflict with critical business or farming periods, some soldiers are required to train during alternative AT periods. This reduces the units' ability to train at anywhere near their authorized strength; it also creates a large pool of soldiers who have not trained with their units in the key training event of the year.

After wrestling with this problem for years, and fighting the tendency to continue doing things the same way, we began looking for alternatives to the single 15-day annual training rotation.

In considering the issue of annual training, we turned to the guidance in Army Regulation (AR) 135-91, FORSCOM Regulations 135-3 and 350-2, and National Guard Regulation 350-1). This guidance states that each Army RC unit must conduct 15 days of annual training during each training year, including travel time, and that the typical 15-day AT period is "a matter of convenience." Further, FMs 25-100, *Training the Force*, and 25–101, *Battle Focused Training*, both state that a key principle

of training is "to sustain proficiency." This principle seeks to reduce the variation between peak training events such as ARTEPs, combat training center rotations, AT periods, and other less focused training.

From this guidance, we developed two models that might be used as alternatives to the typical 15-day AT period at one training location. We began with the following assumptions:

- Training value is the most important factor in this decision.
- Morale and training will improve when annual training is conducted at new locations.
- Sustainment will improve when training is intense, focused, and more frequent.
- Regardless of the option chosen, no additional funding will be available to the RC units.

The first of the possible alternative models calls for two AT periods each year, one seven-day and one eight-day. Either or both of these periods can easily be expanded to nine or ten days if it is held immediately after a weekend inactive duty training (IDT) or "drill" period. The IDT period can be a 20-hour multiple unit training assembly (MUTA), or MUTA-5, combined with the seven-day AT period. Or it can be a MUTA-3 (12 hours) or a MUTA-4 (16 hours) combined with the eight-day AT period. Thus, a unit can conduct two AT periods at different locations, during different seasons of the year, and using different training scenarios.

The second model calls for three five-day AT periods during the year. Each of these periods can be sandwiched between two consecutive weekend drills—two MUTA-4s or one MUTA-5 and one MUTA-4—for a total of ten days of training. This option allows training in three locations, three seasons of the year, and three scenarios.

Evaluation

We evaluated the single 15-day period and the two alternative models on the basis of four criteria—cost, morale enhancement, training value, and training management. We gave equal weight to all of these criteria with the exception of training value, which we rated twice as important as the others. All three models present significant advantages and disadvantages:

One AT Period. The chief advantage to the single 15-day AT period is that it requires the lowest overall cost, because it necessitates only one trip to the training site, one advance party, one round-trip convoy move, and one commercial bus trip. It is also the easiest to administer from a training management standpoint, because it requires only one plan, one ammunition draw, and one training and logistical support package.

Its disadvantages lie in training value and soldier morale. Soldiers are well acquainted with this "generic" AT program, which includes individual skill training, range training, and a field training exercise (FTX) or situational training exercise (STX) of several days. This approach does not allow for a focused training program (one tactical scenario), because there are many administrative and training requirements—range firing of larger weapons, full-scale tactical displacements, brigade and division level "schools"—that can be met only during annual training.

Often, soldiers are not challenged by or enthusiastic about the typical 15-day AT period, especially when their units conduct their ATs at the same training location year after year. Our battalion, for example, includes some soldiers who have attended AT at Fort Drum, New York, for as many as 32 consecutive years. This repetition also seriously undermines training value. After only a few such training periods, the soldiers are no longer challenged by the terrain, the ranges, or the training facilities.

Two AT Periods. The cost of this alternative model is only slightly higher than that of the 15-day option. With a MUTA at the beginning of the AT period, a unit can use the transportation assets—petroleum, oil, and lubricants (POL), commercial buses, toll funds, and the like—it would have used for the MUTA alone.

Training value is improved with this option, since the two AT periods can be conducted at different locations and during different seasons. The training can be focused in any number of ways. For instance, during one of the AT periods an infantry battalion can concentrate on mandatory training requirements (range firing for large systems, CPX/ART-BASS/staff exercises, BOLD SHIFT individual skill validation) and during the other period on FTXs, STXs, or other METL-focused collective training (urban, winter, or waterborne operations, a battalion air assault, or an NBC defense school).

This option also allows personnel (Rep 63s) who have not yet completed advanced individual training (AIT) to attend an AT period with their units instead of waiting until the third summer of their enlistments as they must do under the split-training program. (*Rep 63* soldiers are recent enlistees who have not yet attended basic combat training, BCT. Since these soldiers may be required to wait 30 to 120 days for an active duty service school, depending on MOS, they are not available for annual training. Split training allows high-school and college students to attend BCT and AIT during consecutive summers. Thus, a soldier in this program attends BCT during the first summer, AIT the second summer, and finally attends AT with his unit during the third summer.)

This option should increase morale for the soldiers and their families, in most cases. The soldiers are likely to enjoy training more at different locations, during different seasons, and with only one work-week at a time away from job and family.

One disadvantage is that the two separate AT periods require additional management and supervisory attention as well as two complete planning and resourcing cycles. The planning cycle, normally 10 to 15 months for a single AT period, is reduced to six to ten months, which strains the units' already overburdened leadership resources. But these training management difficulties are probably manageable—as a unit adds one AT period, it deletes two IDT training weekends.

Three AT Periods. The training issues of this alternative model are similar to those of the previous one. Each AT period can be held in a different location

and season, and the training can be focused in any number of ways. For instance, the unit can concentrate one AT period on mandatory training requirements (range firing for large systems, CPX/ARTBASS/staff exercises), and the other two periods on FTX/STX or other focused training (MOUT, winter operations, waterborne operations, battalion air assaults, or NBC defense school).

Unfortunately, converting six IDT weekends and one AT period into three nine-day or ten-day training events dilutes the effectiveness of the remaining IDT weekends. Assuming the battalion uses one MUTA-5 at the beginning of each AT period, one MUTA-4 at the end, and two MUTA-5s for range qualification, only 11 IDT periods are left to cover the remaining seven months. If the unit sees its troops during only one or two assemblies a month, training sustainment, maintenance, and administrative requirements will suffer.

While the number of major training events increases under this plan, 32 to 35 IDT periods each year are used in the sandwiching process, which leaves only 13 to 16 IDTs for the remainder of the year. So few IDTs will not be enough to sustain training in any meaningful way, and this would hurt the unit's administrative and maintenance programs.

Training management difficulties also multiply under this option, even taking into account the reduction in the number of independent MUTAs during the year. RC commanders and staffs are faced with planning three major training events each year, in addition to the required planning and supervision requirements. AT planning time is reduced from the 10 to 15 months available for the traditional model, and the 6 to 10 months for the two-AT model, to the two-to-five-month range. Completing the plans in this short time is comparable to an active duty unit planning and executing three combat training center rotations a year. Under this model, therefore, training management difficulties alone may doom a unit to failure.

The costs associated with this model are also higher than those associated with the other two models. To gain the maximum training benefit from this model, units have to train at three different major training locations during the year. As a result, travel costs probably increase, since most RC units are not within easy travel distance of three major maneuver training installations.

The morale of the soldiers is reduced, because they have to spend three workweeks away from their jobs, farms, or businesses.

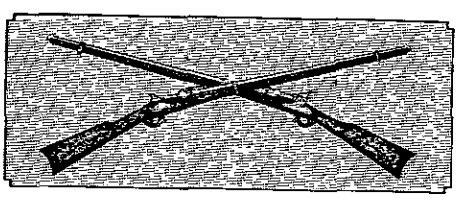
Overall, then, the most training-effective and cost-effective model is the one based on two AT periods each training year. This alternative offers substantial advantages in training value, training management, cost, and morale:

- Because annual training is conducted in more than one location and at different times of the year, the soldiers who would be excluded from the traditional summertime AT have an opportunity to train with their units more often.
- It allows units to train in different locations and seasons of the year; the training can be focused in any number of ways; and the reduced variability in proficiency levels increases sustainment.
- Although training management skills are increased by the addition of one major training event per training year, the planning needed for IDTs is reduced by two weekends. Thus, the staff and the commanders can execute the estimate, decision-making, and execution process more frequently and in greater depth than they would do in planning a single AT each year.
- It has the potential for saving training funds by consolidating transportation, maintenance, subsistence, and ammunition resources, and by combining costs and overhead for the AT periods with the normal expenditures for the two IDT weekends.
- It improves morale, because soldiers like the idea of reducing their time away from home, family, and work. In fact, this model actually reduces by one the number of weekends they spend away from home. (The traditional model requires three weekends, plus two IDT weekends, while this model would require only four weekends.)

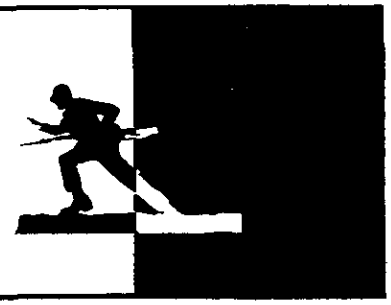
In addition, this model best supports the BOLD SHIFT program and is most in line with the training mandates of FMs 25-100 and 25-101. Because of changes in the prospective threat environment, increasingly tight budgets, and the need to field well-trained units that can deploy after only 30 to 60 days of post-mobilization training, we cannot afford to continue doing business the way we have always done it. This recommended annual training model offers a reasonable alternative.

Major Frank T. Fragale, an Infantry officer, is the Active Guard Reserve (AGR) executive officer of the 1st Battalion, 105th Infantry, 27th Brigade (New York Army National Guard), which is the 10th Mountain Division roundout brigade. He has commanded mechanized, airborne, and light infantry companies. He is a 1982 ROTC graduate of St. Bonaventure University.

Captain Kevin M. Walker, a Judge Advocate General officer, previously served in the 1st Battalion, 105th Infantry, as a company commander, executive officer, and TOW platoon leader. He is now assigned to the 101st Airborne Division. He is a 1985 ROTC graduate of Purdue University and holds a doctorate from Albany Law School.



ENLISTED CAREER NOTES



ANCOC STUDENTS TO RECEIVE RANGER COURSE BRIEFINGS

In the third week of each Advanced Noncommissioned Officer Course (ANCOC) class, the students will receive a briefing on Ranger training along with an opportunity to volunteer to attend the Ranger Course.

For an NCO, this is an opportunity to complete both courses while he is at Fort Benning. Due to training schedules, there may be a short period between the end of ANCOC and the beginning of the Ranger Course, but the student will not return to his unit until after the Ranger Course.

An NCO who volunteers for Ranger training while in ANCOC is responsible for notifying his commander that he will not return until after the Ranger training.

The Ranger Course is 68 days long and consists of four demanding phases at different locations: Fort Benning, Georgia; Fort Bliss, Texas; Dahlonega, Georgia; and Eglin AFB, Florida.

ROTC DUTY

The U.S. Total Army Personnel Command (PERSCOM), Enlisted Infantry Branch, is looking for qualified senior NCOs in the rank of sergeant first class and first sergeant/master sergeant for assignment to ROTC duty. This is a rewarding experience that places qualified NCOs with recent troop leading experience in an academic environment that allows them to challenge and build leaders for the future force.

To qualify for ROTC duty, soldiers must meet the following prerequisites:

- Be professionally qualified.
- Have enough service either to complete a 36-to-48-month tour or be eligible to reenlist or extend.
- Have at least a high school education or the recognized equivalent.
- Have completed the Advanced Noncommissioned Officer course (ANCOC) or have been selected to attend it.
- Have instructional ability and the technical ability to perform duties in their MOS with little supervision.
- Be financially able to maintain their families in communities where government support facilities (such as hospitals, exchanges, and commissaries) may not be available. (Infantry Branch will attempt to match NCO with desired location if possible, but some NCOs will go to high-cost areas away from their area of preference.)
- Have qualified on most recent SQTs (80 or higher) and have GT scores of 100 or higher.
- Have been consistently placed in the upper half of peer group as demonstrated on efficiency reports.
- Meet the Army's physical fitness and weight standards.

Soldiers who are in troop-related assignments immediately before one of these assignments have a better chance of being selected.

Qualified senior NCOs who would like to volunteer for assignment to ROTC duty may submit DA Form 4186 through their personnel service centers. Further information can be found in Army Regulation 614-200 and through unit personnel staff NCOs.

ACTIVE COMPONENT SUPPORT TO THE RESERVE COMPONENTS

A plan to field a balanced mix of Active Army officers and NCOs to support the training and readiness of the Reserve Components (National Guard and Army Reserve) was approved in 1992.

This program, which is being implemented in phases, began with a pilot program assigning 268 officers and 164 NCOs to Resident Training Detachments for the Reserve Component (RC) round-out/up brigades (to our Active Army divisions in the continental United States) and to certain test units and Operational Readiness Exercise Teams for each of the Continental U.S. Armies (CONUSAs) and the U.S. Army Pacific Command. Tours with this program are capped at 36 months.

PERSCOM selects soldiers for these assignments on the basis of the quality of their files and their experience in Active Army assignments that is directly related to the skill and training needs of the RC units they will support. Soldiers assigned to the program, for the most part, live in the communities of the units they support and work directly with the unit leaders. They help develop and conduct soldier, leader, and battle staff training, simulation and device-based training, training support coordination, and individual and collective training execution and evaluation.

Operational Readiness Exercise Teams assist the CONUSA commander in providing well-resourced training exercises, institutionalizing high standards in training and resources management, and improving unit status reporting and readiness.

Soldiers assigned to these positions are encouraged to resolve all personnel and financial issues before reporting to an RC unit. Many of the assignment locations are far from active Army installation personnel and finance offices.

Additional assignment phases are scheduled for FY 1994. PERSCOM will again select the very best soldiers available for these assignments.

BRADLEY TRANSITIONAL ASI

It was announced earlier that soldiers in MOS 11H who received training on

the Bradley fighting vehicle would be awarded the transitional ASI (additional specialty identifier) of 4A. This was an error.

The proposal for an ASI to identify 11H soldiers who are trained on the Bradley TOW vehicle (BTV) is being processed. In the interim, soldiers receiving training through One Station Unit Training (OSUT), the Bradley Leaders Course, or New Equipment Training will receive a personnel development identifier that will be used to add the ASI to their records when it is approved.

AGR PROGRAM NEEDS JUNIOR ENLISTED SOLDIERS

The Active Guard Reserve (AGR) program is looking for enlisted soldiers in the ranks of specialist, sergeant, and staff sergeant. Despite overstrength in the senior grades, more than 150 junior enlisted soldiers are needed to fill jobs in support of troop program units.

There are shortages in personnel administrative specialists (MOS 75B), supply specialists (92Y), heavy-wheel vehicle mechanics (63S), and light-wheel vehicle mechanics (63B).

Although these vacancies are spread all over the country, most are concentrated in the northeastern United States. To reduce the soldiers' costs of establishing new homes in high-cost areas, strong consideration will be given to applications from soldiers already living in those areas.

Anyone who would like more information and an application packet may call 1-800-255-4839.

SDT PROGRAM PAVES WAY TO PROMOTIONS FOR RC NCOs

The Army's new NCO Self-Development Test (SDT), when fully implemented, could unlock the door to promotions and choice school selections for Army Reserve NCOs.

Thousands of Army Reserve NCOs have already taken part in the SDT program, which was implemented in 1990 as a way for NCOs to measure and guide their professional growth as they continued to develop as leaders.

The SDT is a three-part, formally administered written test designed to challenge and strengthen an already outstanding NCO corps through individual study and preparation. The test measures leadership, training management, and MOS knowledge; promotes self-development in the MOS; and helps prepare NCOs for future assignments.

Army Reserve NCOs in the ranks of sergeant, staff sergeant, and sergeant first class began taking the test in October 1992. As with the test's predecessor, the Skill Qualification Test, Army Reserve NCOs must take the SDT at least every two years, and Active Guard Reserve (AGR) soldiers must take it annually.

Army Reserve NCOs will take the SDT in their primary MOSs and at the skill level that corresponds to their pay grades. NCOs who are working toward duty MOS qualification will not be tested until they are duty MOS-qualified. NCOs who are working temporarily in other MOSs will be tested only in their primary MOSs.

The SDT will be scored using a simple "percent correct" formula, and NCOs will receive scores on their initial Individual Soldier's Report (ISR) within 30 days of testing. At the end of the 12-month period, they will receive final ISRs that show their percentile ranking (how well they did in comparison to all other Reserve NCOs who took the same test).

A proposal to delay implementing the SDT link to the Enlisted Personnel Management System (EPMS) for the Army Reserve until 1995 has been approved. This delay will give the Army Reserve a two-year validation phase.

Once the SDT is linked to the EPMS for Army Reserve NCOs, it will be effective in identifying and rewarding soldiers who have shown initiative and who have excelled in their self-development. The SDT will provide input to EPMS decisions that influence promotion and school selections.

USMA PREPARATORY SCHOOL

The United States Military Academy Preparatory School at Fort Monmouth, New Jersey, is an excellent way for outstanding soldiers to qualify for attendance at the United States Military Academy (USMA) at West Point, New York. *(See INFANTRY, March–April 1993, pages 46–47.)*

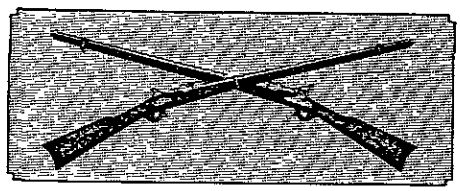
Further information is available from Commandant, USMAPS, Fort Monmouth, NJ 07703; telephone DSN 992-1807/1808 or commercial (908) 532-1807/1808.

SCHOOL OF THE AMERICAS NEEDS INSTRUCTORS

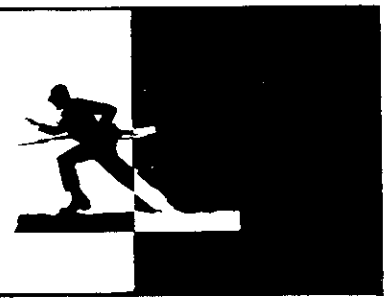
PERSCOM is looking for 11B infantrymen who would like to volunteer for instructor duty at the School of the Americas at Fort Benning, Georgia.

Volunteers must be Spanish linguists; in the ranks of sergeant (promotable), staff sergeant, and sergeant first class; and have solid demonstrated performance files. Those who are not Ranger qualified may volunteer to attend the Ranger Course on temporary duty enroute to these instructor assignments.

Interested soldiers may submit DA Form 4187, Personnel Action Request, to PERSCOM, ATTN: TAPC-EPK-I, 2461 Eisenhower Avenue, Alexandria, VA 22331-0452.



BOOK REVIEWS



THE OTHER BATTLE OF THE BULGE: OPERATION NORTHWIND. By Charles Whiting. Avon Books, 1990. 214 Pages. $4.99, Softbound. Reviewed by Colonel Cole C. Kingseed, United States Army.

Contrary to popular belief, the last great German offensive in the West was not the Ardennes offensive in mid-December 1944, but rather a concentrated attack against Lieutenant General Jacob L. Devers' U.S. 6th Army Group just north of the Colmar Pocket.

On the last day of 1944, eight German divisions smashed into General Alexander Patch's Seventh U.S. Army, composed of American and French troops in the vicinity of Strasbourg, the capital of the Alsace-Lorraine region. By the time the Germans retreated across the Rhine the following February, the Allies had sustained more than 40,000 casualties.

In this book, Charles Whiting relates the saga of the men who waged this second Battle of the Bulge. Sometimes prone to exaggeration, he asserts that the Ardennes offensive paled in significance to Hitler's New Year's Eve offensive and that, had the German attack succeeded, the Western Alliance might have collapsed and France could have plunged into political anarchy. Moreover, the author posits that Charles de Gaulle's desire to maintain France's military independence from NATO's command structure a decade later stemmed from General Dwight Eisenhower's apparent willingness to yield Strasbourg to the advancing Germans. Whiting goes so far as to trace the later U.S. involvement in Vietnam to the relationship borne by American and French military leaders in the fighting around Strasbourg. Such an assertion stretches credibility and ignores the realities of international power politics.

What Whiting does do well is describe the desperate fighting that occurred in the initial months of 1945. The Colmar fighting, largely ignored by many military historians, was nothing short of attrition warfare in which both sides suffered catastrophic casualties. French casualties alone neared 30,000 before the Germans were evicted from the Colmar salient. Individual and unit acts of bravery were common throughout the fighting. This was where Audie Murphy earned his Congressional Medal of Honor, and where the U.S. 3d Battalion, 157th Infantry, cut off and surrounded, was forced to capitulate after reviving the story of another "Lost Battalion" a generation earlier.

Whiting's book could have borne closer editing. Such errors as conflicting dates for the German offensive, and the lack of adequate maps detract from the text. Those shortcomings aside, however, the book is a provocative analysis of infantrymen in winter combat—an interesting narrative about one of this nation's lesser known campaigns.

BURNSIDE. By William Marvel. University of North Carolina Press, 1991. 514 Pages. $22.50. Reviewed by Major Don Rightmyer, United States Air Force.

What is Ambrose P. Burnside to be remembered for, beyond his command of the Union army at the disaster of Fredericksburg in December 1862, and his distinctive sidewhiskers that gave us the term *sideburns*? The answer is: a great deal. This new biography of William Marvel sheds light on Burnside's Civil War career and accomplishments that allow for conclusions far different from those his peers and history have generally accorded him.

Burnside graduated from West Point in time to be sent to the Mexican War, but hostilities stopped the day he reported to his unit. He subsequently left the Army in 1853 but returned during the Civil War and first saw combat action at Bull Run in July 1861. He was then dispatched to command troops for a Union expedition against the Carolina coast, and his success there catapulted him into national visibility. He also commanded troops at the battles of South Mountain and Antietam and, upon McClellan's final dismissal in late 1862, was placed in charge of the eastern Army of the Potomac.

Burnside must take much of the blame for the defeat on the frozen plain west of Fredericksburg, but the author persuasively argues that General William B. Franklin's failure to attack as agreed also contributed to the Union defeat. Following an unsuccessful "mud march" and disloyal maneuvering among his subordinates, Burnside was relieved from command. But he did not retreat to obscurity. He was sent to Ohio, in charge of the Ninth Corps, where he found himself busy fighting both the military and the civilian aspects of the war. Later, he was placed in charge of the Army's Department of the Ohio.

In late 1863 Burnside was assigned to pursue one of the president's pet priorities—military operations in eastern Tennessee—and led the capture of Knoxville. In 1864 he was moved back to a corps command in the east and fought at the Wilderness, Spotsylvania, Cold Harbor, and Petersburg. Following the fiasco at the Crater, he was denied further assignments and finally resigned from the Army on the day of President Lincoln's assassination.

Overall, Ambrose Burnside was an honest and humble soldier. That honesty and humility—along with superiors and subordinates who took personal advantage of those qualities—appeared to be the downfall of his military career and reputation. The author has done much to provide a more objective examination of his performance in action and his abiding loyalty to those with whom he served. This well-written biography provides a sobering look at the interplay of the human personalities and frailties that are found in the military as in any other walk of life. This book gives us a badly needed corrective to the biased and distorted history that has previously found its way into print.

THE U.S. ARMY IN TRANSITION II: LANDPOWER IN THE INFORMATION AGE. By Lieutenant General Frederic J. Brown, U.S. Army Retired. An AUSA Book. Brassey's (US), 1993. 224 Pages. $24.00. Reviewed by Lieutenant Colonel Albert N. Garland, United States Army Retired.

After reading these 200-plus pages, I can only say that they contain too little meat. In the author's defense, though, he says he never intended to offer either "detailed policy and program changes" or "explicit force structure recommendations." He also says he will actually shun "proposing a future defense program," but I found in the book a

number of rather sizable defense programs that he does propose, including those dealing with his beloved M1A2 Abrams tank and all kinds of computer chips.

The author feels the computer chip will be the answer to all of the Army's problems in the future, but I have great difficulty understanding a computer's value to the young infantry platoon leaders or company commanders patrolling the streets of Mogadishu, even as they look forward to tramping the hills of Bosnia.

As usual, the infantry gets the short end of the stick. True, it was given the Bradley, but had to sacrifice its squad organization in the process. (Ever since, the infantry community has been badly divided over the vehicle's use—battle taxi, gun platform, or tank destroyer. The dismount element, what there is of it, is often overlooked entirely.) Aside from the Bradley, however, the infantry has received precious little else during the past 20 years that it did not already have in Vietnam.

Today, no matter what the author seems to think, we are engaged in a war of the future in Somalia. And we may soon be engaged in a similar war in Bosnia. We need a lot more "low tech" weapons and equipment and fewer "high tech" gadgets. We also need to learn how to deal with casualties, lots of them. This is something we knew how to do at one time but something that seems to throw us into a tizzy today when the word is even mentioned. Politicians care little about Clausewitz or the Weinberger doctrine. So, in the infantry, we have to concentrate on training with our basic tools and equipment—rifles and machineguns, light mortars (or we can leave them home), mines and booby traps, flame throwers (do we still have one in the inventory?), grenades, and the like. Somebody might also deliver a decent and reliable weapon the individual soldier can use against armored vehicles.

Finally, if we are going to work closely with other armies, we had better let go of this idea that "we are the best and the brightest," and "we will teach you all you need to know about training and fighting." There are some pretty good armies out there, and we might well listen and learn a thing or two from them.

SOLDIERS OF THE SUN: THE RISE AND FALL OF THE IMPERIAL JAPANESE ARMY. By Meirion and Susie Harries. Random House, 1992. 557 Pages. $30.00. Reviewed by Dr. Charles E. White, Infantry School Historian.

This book is a fascinating account of the Imperial Japanese Army, from its creation in 1868 to its defeat in 1945. In those 80 years, Japanese military and civilian elites transformed their tiny island nation into a modern imperial power capable of remarkable military feats. In doing so, they refused to surrender their feudal traditions and customs, thus laying the foundation for the destruction of Japan during World War II.

This is an important book, the first full history of the Imperial Japanese Army to be published in the West. The authors trace the origins of the Imperial Army back to its samurai roots in 19th Century Japan, and then describe its extraordinary rise and fall. They detail the Army's command structure, weaponry, support services, conscription models, educational infrastructure, and training, as well as the brutality that pervaded the daily lives of the men, and the slow deterioration of the officer corps.

But this is more than just a history of an incredible military force. It is the story of a nation trying to find its "place in the sun." The authors examine the creation of the Imperial Army squarely in the larger context of a transforming Japanese society, complete with all the inherent contradictions of social Darwinism and imperialism.

The feverish pace of Japanese modernization during the latter half of the 19th Century caused a tremendous amount of stress for both the army and the society. With it came the end of a homogeneous society and the creation of a synthetic culture in which tradition and modernism led an uneasy coexistence. Thus, it was possible for the Imperial Japanese Army to display the highest qualities of the old code of the Bushido ("the way of the warrior"), while simultaneously possessing such a capacity for barbarism.

This is the story of a highly disciplined army that fell victim to its own mythology. In many respects, it reminds the reader of the United States Army today.

THE BATTLE OF BATAAN. By Donald J. Young. McFarland & Company, 1992. 381 Pages. $39.95. Reviewed by Chris Timmers, Matthews, North Carolina.

In 1990, Lieutenant Colonel John W. Whitman brought forth *Bataan, Our Last Ditch*, a comprehensive study of the battle for and subsequent loss of the Philippines in 1942 (reviewed in the INFANTRY, May-June 1991, page 51). Now, some two years later, Donald Young has produced a similar work on the same campaign. Both authors conducted thorough, exhaustive research into existing official records as well as previously written accounts. Both authors also interviewed and corresponded with a number of the survivors of the Bataan campaign, and the remembrances of those survivors are produced faithfully.

It is the unenviable task of a reviewer to contrast two works on the same subject published rather close to each other. Young has written a readable and even engrossing account of the United States' first Far East campaign of World War II. But to those of us who have read Whitman's account, the feeling that we've been here before, that all this ground has already been covered, is unavoidable. No one can doubt that Young devoted much of himself to this work, but the accounts of the privation of the U.S.-Filipino forces—their dated weapons, their lack of support from the sea and the air, their making do with scarce resources—have already been addressed in the earlier book.

Nonetheless, Young's book is easier to read and offers a comprehensive account of early Western Pacific campaigns that students can absorb and appreciate more quickly than Whitman's. And Young's work does have a special appeal for those who seek the more personal touch sometimes missing from scholarly wartime studies. One of these touches is his frequent quotes from the poetry of Lieutenant Henry G. Lee, U.S. 31st Infantry—the Poet of Bataan. Excerpts from Lee's poems punctuate various chapters and episodes of Young's work and add a human dimension that is missing from Whitman's book.

When confronted with Young's book, one might be tempted to ask, "Do we need another account of Bataan?" Well, yes we do. There can be no surplus of works that pay honor to the men who sacrificed so much for so long, who endured such suffering only to be forgotten in the euphoria following the triumphant Allied advance through the Western Pacific—an advance that culminated in the signing by the Japanese of a surrender document aboard the USS Missouri in Tokyo Bay in September 1945. We must never forget the "Battling Bastards of Bataan," and I hope writers like Young and Whitman never let us.

TRAGIC MOUNTAINS: THE HMONG, THE AMERICANS, AND THE SECRET WARS FOR LAOS, 1942-1992. Jane Hamilton-Merritt. Indiana University Press, 1993. 580 Pages. $29.95. Reviewed by Dr. Joe P. Dunn, Converse College.

I have read and reviewed hundreds of books on the Indochina wars, but few have

had the impact of this seminal work, which vividly depicts the abandonment, betrayal, and attempted genocide of a proud and courageous people. Yet unlike "the killing fields" of Cambodia, the plight of the Hmong is little known, and their fate has been ignored, distorted, and rationalized.

Jane Hamilton-Merritt, now a college professor with a doctorate in Southeast Asian studies, was nominated for a Pulitzer Prize as an Indochina war correspondent and combat photographer in the late 1960s. During that time, she attempted unsuccessfully to penetrate the veil of secrecy and cover the clandestine operations in the northern provinces of Laos. After the war, most journalists moved on to other concerns, but her commitment to the Hmong compelled the 14-year preparation of this book.

With official records unavailable for the foreseeable future, the author relied on exhaustive interviews with more than 1,000 French, Americans, Thais, Lao, Hmong, and more than a dozen other Indochinese minorities, as well as other European and Asian participants. Her U.S. sources include policymakers, diplomats, academics, and the various types of Central Intelligence Agency operatives in the secret war. She made 25 trips to refugee camps in Thailand, visited every sizable Hmong community in the United States and France, amassed her own collection of documents, and took more than 10,000 pictures of Hmong life. The resulting volume fills a gap in the larger picture of the Indochina War.

The action begins during World War II as the Hmong joined their French patrons (against Lao and Vietnamese discrimination) to fight Japanese, and later Viet Minh, encroachment into the Hmong's mountainous homeland. Much of the book revolves around the exploits of young Vang Pao, an amazing charismatic military and political leader. During the Viet Minh war, a French officer arranged for this exceptional 18-year-old Hmong soldier to join the Laotian officer corps. He rose to general officer rank and led the Hmong against the communists during the 1960s and 1970s.

The heart of the book deals with the "secret war" in the 1960s and 1970s. It provides the most thorough account available, albeit only a glimpse, of the still enshrouded conflict, introducing such legendary American participants as Jerry "Hog" Daniels, Pop Buell, Colonel Billy, and Richard Secord. More important, it chronicles the incredible bravery, effectiveness, and loyalty of the Hmong soldiers who conducted guerrilla campaigns, provided base defense, rescued U.S. fliers, collected combat intelligence, and even flew as skilled combat pilots.

The tragedy of the Hmong after U.S. withdrawal is the most disturbing discussion. The author details the systematic genocide by the Laotian communists, including institutionalized rape, torture, murder, removal of children from their families, and other atrocities in the Lao gulag. She carefully documents the chemical-biological toxin "yellow rain" poisoning of the Hmong, and easily refutes the propaganda campaign to depict this barbarism as infestations of "bee feces" or other equally absurd explanations. Moreover, she depicts the continuing misery of those who managed to flee to the squalid refugee camps in Thailand and describes the continuing plight of the 125,000 Hmong who ultimately settled in the United States. Unfortunately, in eagerly pursuing the normalization of relations with the Lao Peoples Democratic Republic, the United States has evinced only minimal concern for Laotian atrocities and the Thais forced the repatriation of the Hmong back to the brutality of the Laotian communists. The result is a sad saga of indifference and perfidy.

Beautifully written, moving, horrifying, and candidly honest, this book—a manifesto for U.S. obligation, moral fortitude and justice—deserves wide attention from scholars and general readers alike.

SILENT WINGS AT WAR: COMBAT GLIDERS IN WORLD WAR II. By John L. Lowden. Smithsonian Institution Press, 1992. 187 Pages. Reviewed by Lieutenant Colonel Jack Mudie, United States Air Force Retired.

The vast majority of rated Army Air Force fliers during World War II wore the wings of pilot, navigator, bombardier, or gunner. There were several other much less common types, such as those for service and glider pilots, which were basic pilot wings with an "S" or a "G," respectively, superimposed. (Glider pilots maintained that the "G" stood for guts, and this book, written by one of their own, supports that claim.)

General Matthew B. Ridgway's prologue salutes the glider pilots as "a special breed of men," and Walter Cronkite, in his introduction, advises would-be warriors that there are many ways to go to war—by land, sea, or air, or by any variations thereof—but if given a choice, his advice (from one who did it) is *never* to go by glider.

Author John Lowden chronicles his own training and combat experiences in the European Theater and includes descriptions of other occasions when gliders were used in World War II. He maintains that all the Allied uses of gliders were ineffective at best and disasters at worst, such as the fratricidal downing by U.S. and British warships of 34 planeloads of paratroopers during the invasion of Sicily, and the better-known tragedy of the "bridge too far" at Arnhem. He credits only the German planners with the ability to avoid suicidal results in glider operations.

This book is an interesting account of the way most paratroopers entered battle during World War II—as glider-riders. The maps, photographs, and quoted recollections of numerous other fellow-glider pilots add to the quality of this book as a historical autobiography.

Unfortunately for the overall quality of the book, Lowden adds an epilogue that contains a number of unfounded assertions. For example, his disdain for Allied planners in general apparently prompts him to blame the ineffectiveness of the Doolittle Tokyo raid on our Navy's failure to account for the crossing of the International Date Line, thus causing the B-25 aircraft to arrive over the targets in the daylight instead of at night, as planned. He fails to explain how a full 24-hour error would change night to day. Nevertheless, this is a typically excellent publication about a little-heralded facet of World War II operations.

HONORABLE TREACHERY: A HISTORY OF U.S. INTELLIGENCE, ESPIONAGE AND COVERT ACTION FROM THE AMERICAN REVOLUTION TO THE C.I.A. G.J.A. O'Toole. The Atlantic Monthly Press, 1991. 591 Pages. Reviewed by Major Richard Ugino, New York Army National Guard.

This book is a comprehensive, well-researched history of intelligence activities in this country by retired intelligence professional G.J.A. O'Toole. O'Toole uses open sources to examine the growth of the U.S. intelligence profession and presents his story in the crisp, readable narrative. He brings to the forefront an analysis of intelligence against the historical background and framework of the times, rather than simply reciting events as previous works have done. This tactic is highly successful in showing why an operation happened and what effect it had on subsequent events.

O'Toole shows how intelligence played an important role from the time of the Revolution when one of the first "case officers" (and intelligence methods trainers) was George Washington himself. Coupled with

the author's research on both rebel intelligence and British counterintelligence activities during that time, these chapters are among the best and most interesting. The author sheds new light on intelligence organizations, many of them lost in obscurity—for example, the Civil War "Bureau of Military Information," President Woodrow Wilson's "Inquiry," and the better known Office of Naval Intelligence (ONI) and Office of Strategic Services (OSS). O'Toole is one of the first to credit ONI with being the exclusive custodian of U.S. intelligence operations and contingency planning in the period from 1898 until after World War I.

While this book focuses on people and events, it also honestly appraises such intelligence failures as the Pearl Harbor attack and the Bay of Pigs incident. About the latter, the author writes: *Had the missiles been discovered* after *they were operational, air strikes and perhaps an invasion would have been America's response... all that stood in the way... were the U-2 pilots and a colonel at DIA* [Defense Intelligence Agency] *who had discovered the missiles* before *they became operational and contrary to CIA* [Central Intelligence Agency] *analysis.*

Comprehensive in scope and balanced in its assessments, this is one of the best historical overviews of intelligence that has been published in quite some time. It is of value to all military professionals and a good addition to any reader's library.

GUARDIANS OF THE GULF: A HISTORY OF AMERICA'S EXPANDING ROLE IN THE PERSIAN GULF, 1833-1992. By Michael A. Palmer. Free Press, 1992. 328 Pages. $24.95. Reviewed by Major Harold E. Raugh, Jr., United States Army.

Although the affairs of the Persian Gulf region captured Americans' attention only during the past few decades, U.S. involvement in the area actually began more than 150 years ago.

Michael A. Palmer, an assistant professor of history at East Carolina University and author of previous works on maritime strategy, has chronicled with insight and rich detail the United States' increasing involvement in the Persian Gulf. Beginning with the arrival of a small naval force in Muscat, Oman, in 1833, the U.S. increased its commercial activities in the area, while the British continued to bear the burden of defending Western interests.

The discovery of oil at the beginning of the 20th Century accelerated U.S. capitalism in the region, but it was not until World War II and its aftermath that the United States developed a coherent strategy for the region. According to Palmer, "American policymakers *planned* to increase the world's dependence on Middle Eastern oil and *expected* to have to shoulder political and economic responsibility for the security of the gulf." That expectation became a reality in the late 1960s when the United States supplanted a weakened Great Britain as the dominant political and military power in the gulf.

The book chronicles in rich detail the trials and tribulations of U.S. policy in the region during the tumultuous 1970s, during the Arab oil embargo, and when the United States relied upon and supported the "Twin Pillars" of Iran and Saudi Arabia as coequal regional powers. The book also details and assesses the reflagging of Kuwaiti tankers and the events leading to Saddam Hussein's August 1990 invasion of Kuwait.

Operations DESERT SHIELD and DESERT STORM have been, to date, the culmination of U.S. policy in the gulf and incontrovertible evidence of American resolve. The chapters that describe these events are especially interesting. The author suggests that the Allied ground plan to maneuver around the Iraqi right flank was not an especially innovative strategem. "In fact," Palmer writes, "given the state of current U.S. Army doctrine, the size of the force deployed to Saudi Arabia, and the geography of the Kuwaiti Theater of Operations, [General Norman] Schwarzkopf had little choice but to go around the Iraqi right flank." Palmer also argues convincingly that the DESERT STORM deception plan was not as effective, or as responsible for the Iraqi defeat, as has been claimed.

Throughout the book, Palmer demonstrates a superb grasp of military operations, especially the related technological aspects of aerial and naval warfare. His depth of research and his skillful use of relevant primary and secondary source material are shown clearly in 46 pages of endnotes and 13 pages of bibliography. Three pages of maps are also worthwhile.

This is an enthralling, singularly outstanding book, a model of clarity and good scholarship. *Guardians of the Gulf* is an indispensable addition to the libraries of those who served in the Persian Gulf and to anyone who is interested in this volatile region where "U.S. policy... must be considered a success."

RECENT AND RECOMMENDED AMERICAN HERITAGE CIVIL WAR WALL CALENDAR. Full color lithographs and paintings. Commentary by Stephen W. Sears. Workman Publishing (708 Broadway, New York, NY 10003), 1993. 28 Pages. $9.95.

THE READY BRIGADE OF THE 82ND AIRBORNE IN DESERT STORM: A COMBAT MEMOIR BY A HEADQUARTERS COMPANY COMMANDER. By Dominic J. Caraccilo. McFarland & Company, 1993. 213 Pages. $16.95, Softbound.

THE MILITARY EXPERIENCE IN THE AGE OF REASON. By Christopher Duffy. Atheneum Publishers, 1988. 346 Pages. $24.95.

REFORGING THE IRON CROSS: THE SEARCH FOR TRADITION IN THE WEST GERMAN ARMED FORCES. By Donald Abenheim. Princeton University Press, 1989. 266 Pages. $29.95.

AUSTRIAN SPECIALIST TROOPS OF THE NAPOLEONIC WARS. Text by Philip J. Haythornthwaite. Color Plates by Bryan Fosten. Men at Arms Series No. 223. Osprey, 1990. 48 Pages.

THE AGE OF TAMERLANE. Text by David Nicole. Color Plates by Angus McBride. Men-at-Arms Series No. 222. Osprey, 1990. 48 Pages.

THE LIFE AND DEATH OF HERMANN GOERING. By Ewan Butler and Gordon Young. First published in hardcover in 1951. A David and Charles Military Book. Sterling, 1990. 256 Pages. $8.95, Softbound.

SECRET WARFARE: THE BATTLE OF CODES AND CIPHERS. By Bruce Norman. First published in hard cover in 1973. A David and Charles Military Book. Sterling, 1990. 192 Pages. $8.95, Softbound.

THE RETREAT FROM BURMA, 1941-1942. By James Lunt. First published in hard cover in 1986. A David and Charles Military Book. Sterling, 1990. 328 Pages. $8.95, Softbound.

HITLER: A STUDY IN TYRANNY. By Alan Bullock. A reprint of the 1971 abridged edition. HarperCollins, 1991. 489 Pages. $12.95, Softbound.

TOP GUNS: AMERICA'S FIGHTER ACES TELL THEIR STORIES. By Joe Foss and Matthew Brennan. Pocket Books, 1991. 338 Pages. $21.95.

RUSSIAN IMPERIAL MILITARY DOCTRINE AND EDUCATION, 1832-1914. By Carl Van Dyke. Contributions in Military Studies No. 105. Greenwood, 1990. 216 Pages. $55.00.

ICE-BREAKER: WHO STARTED THE SECOND WORLD WAR? By Viktor Suvorov. Translated by Thomas B. Beattie. Viking, 1990. 364 Pages. $22.95.

MODERN MILITARY DICTIONARY: ENGLISH-ARABIC/ARABIC-ENGLISH. Second Edition. By Maher S. Kayyali. Hippocrene, 1991. 250 Pages. $30.00.

SEALS: UDT/SEAL OPERATIONS IN VIETNAM. By T.L. Bosiljevac. Ballantine, 1991. 272 Pages. $5.95, Softbound.

BATTLEFRONT VIETNAM. By Tom Carhart. Warner Books, 1991. 180 Pages. $4.95, Softbound.

BODYGUARD OF LIES. By Anthony Cave Brown. Originally published in hard cover in 1975. Morrow, 1991. A Quill Book. 947 Pages. $16.95, Softbound.

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INFANTRY SCHOOL DIRECTORY

The following directory is offered as an aid to people in the field who may have questions they want to ask the various departments and divisions of the Infantry School. All telephone numbers are DSN (Defense Switched Network). To call the Fort Benning numbers on commercial lines, dial area code 706; then convert 835 prefixes to 545 and 784 prefixes to 544.

In addition to these points of contact, the Infantry School maintains a hotline specifically to receive questions and comments from the field. The number is DSN 835-7693; commercial (706) 545-7693. Questions are recorded, and answers are returned within 48 hours. Lengthy questions or comments should be sent in writing to Commandant, USAIS, ATTN: ATSH-ES, Fort Benning, GA 31905-5420.

Assistant Commandant	
BG Jack P. Nix, Jr.	835-5296
Deputy Assistant Commandant	
COL Gregory C. Camp	835-5231
Combined Arms and Tactics Department	
Director, COL Galen Jackman	835-4539
Combined Arms and Leadership Division	835-5475
Doctrine Division	835-7162
Tactics Division	835-5726
Military History Division	835-5610
Directorate of Combat Developments	
Director, COL William N. Patterson	835-1316
Materiel Systems Division	835-1915
Electronics and Special Developments Division	835-7514
Firepower Division	835-1016
Systems Priority and Integration Division	835-1041
Test and Evaluation Division	835-3630
Directorate of Operations and Training	
Director, COL Howard W. Crawford, Jr.	835-5717
Aviation Division	835-4680
Current Operations Division	835-7574
Evaluation and Staff Education Division	835-7617
INFANTRY Magazine	835-2350
National Infantry Museum	835-2958
Plans and Readiness Division	835-4252
Range Division	835-4619
Resource Management Division	835-4087
Training and Analysis Division	835-5620
Training Support Center	835-2132
Systems Division	835-2571
Dismounted Warfighting Battle Lab	
Director, COL Arnold J. Canada	835-2489
Board Division	835-4922
Simulations Center Division	835-5867
Infantry Training Brigade	
Commander, COL Theodore R. Severn	784-8216
1st Battalion, 19th Infantry	784-9179
3d Battalion, 32d Infantry	784-9253
1st Battalion, 38th Infantry	784-8717
1st Battalion, 50th Infantry	784-9820
2d Battalion, 54th Infantry	784-9121
2d Battalion, 58th Infantry	784-9368
30th AG Battalion (Reception)	784-9902
Ranger Training Brigade	
Commander, COL Michael V. Church	784-6980
4th Ranger Training Battalion (Benning Phase)	784-7171
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